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US Army Information Systems Engineering Command Fort Huachuca, AZ 85613-5300

U.S. ARMY INSTITUTE FOR RESEARCH IN MANAGEMENT INFORMATION, COMMUNICATIONS, AND COMPUTER SCIENCES

A Tailoring Guide for the Use of DOD-STD-2167A, Defense System Software Development in Concert with DOD-STD-7935A DOD Automated Information Systems (AIS) Documentation Standards

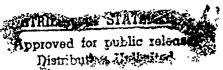
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THIS REPORT HAS BEEN REVIEWED AND IS APPROVED

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FOREWORD

This handbook provides guidance in tailoring DOD-STD-2167A, "Defense System Software Development," for use in concert with DOD-STD-7935A, "DOD Automated Information Systems (AIS) Documentation Standards," for AIS development. It includes a checklist of True/False statements and associated tailoring actions which, when completed, can be attached to a Statement of Work. The result should be a contract that takes advantage of the software engineering and management approaches embodied in DOD-STD-2167A while maintaining the use of the superior documentation items associated with DOD-STD-7935A. It should be noted that other tailoring of DOD-STD-2167A may be required to adjust the names of the life cycle phases, the reviews and audits, and required actions/products to those necessary to conform with other AIS requirements.

A Tailoring Guide
for the Use of DOD-STD-2167A,
Defense System Software Development
in Concert with DOD-STD-7935A,
DOD Automated Information Systems (AlS)
Documentation Standards

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1. SCOPE

- 1.1 <u>Purpose of the handbook.</u> This handbook provides guidance to Government program managers and other program office staff responsible for tailoring DOD-STD-2167A for an AIS software development or support contract.
- 1.2 Application.
- 1.2.1 <u>Contracts imposing DOD-STD-2167A</u>. This handbook can be used in preparing any AIS software development or support contract that imposes DOD-STD-2167A.
- 1.2.2 Guidance to Government. This handbook offers guidance to Government agencies and should not be included in procurement packages or contracts as a contractually binding document.
- 1.2.3 Assistance for contractor-recommended tailoring. When contractors are asked to provide recommended tailoring of DOD-STD-2167A for use on AIS software development or support contracts, this handbook may be used to assist that effort. Final tailoring decisions remain the responsibility of the Government contracting agency.

2. REFERENCED DOCUMENTS

- 2.1 Government documents.
- 2.1.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks are referenced in this handbook:

MILITARY STANDARDS

- DOD-STD-480A, "Configuration Control Engineering Changes, Deviation, and Waivers," 12 Apr. 78
- MIL-STD-481, "Configuration Control Engineering Changes, Deviations, and Waivers (Short Form)"
- MIL-STD-483A (USAF), "Configuration Management Practices for Systems, Equipment, Munitions, and Computer Programs," 04 Jun 85
- MIL-STD-490A, "Specification Practices," 04 Jun 85
- MIL-STD-499A (USAF), "Engineering Management," 01 May 74
- MIL-STD-1521B, "Technical Reviews and Audits for Systems, Equipments, and Computer Software," 04 Jun 85
- DOD-STD-2167A, "Defense System Software Development," 29 Feb 88 and associated DIDs
- DOD-STD-2168, "Defense System Software Quality Program," 29 Apr 88
- DOD Standard 5200.28-STD, "DOD Trusted Computer System Evaluation Criteria," 26 Dec 85
- DOD-STD-7935A, "DOD Automated Information Systems (AIS) Documentation Standards," 31 Oct 88 and associated DiDs

MILITARY HANDBOOKS

- MIL-HDBK-287, "A Tailoring Guide for DOD-STD-2167A, Defense System Software Development," 11 Aug 89
- 2.1.2 Other Government documents, drawings, and publications.
 - DODD 3020.26, "Continuity of Operations Policies and Planning," 24 Oct 85
 - DOD 5200.1-R, "DOD Information Security Program," 07 Jun 82
 - DODD 5200.28, "Security Requirements for Automated Information Systems (AISs)," 21 Mar 88

- DOD Manual 5200.28-M, "ADP Security Manual (C3I)," Jan 73
- DODD 5400.11, "DOD Privacy Program," 09 Jun 82
- DODI 7041.3, "Economic Analysis and Program Evaluation for Resource Management," 18 Oct 72
- DODD 7920.1, "Life Cycle Management of Automated Information Systems," 20 Jun 88
- DODI 7920.2, "Major Automated Information System Approval Process," 07 Mar 90
- DODI 7920.4, "Baselining of Automated Information Systems (AIS)," 21 Mar 88
- DODI 7935.1, "DOD Automated Data Systems Documentation Standards," 13 Sep 77
- FIPS PUB 11-2, "Guideline: American National Dictionary for Information Processing"
- 2.2 Other publications. None.

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3. DEFINITIONS

3.1 <u>Definitions of acronyms used in this standard.</u> See Appendix A.

4. GENERAL INFORMATION

- Purpose of handbook. This handbook is a guide for the use of DOD-STD-2167A, "Defense System Software Development," in concert with DOD-STD-7935A, "DOD Automated Information Systems (AIS) Documentation Standards," for AIS development. It includes a checklist of True/False statements and associated tailoring actions which, when completed, can be attached to a Statement of Work. The result should be a contract that takes advantage of the software engineering and management approaches embodied in DOD-STD-2167A while maintaining the use of the superior documentation items associated with DOD-STD-7935A. It should be noted that other tailoring of DOD-STD-2167A may be required to adjust the names of the life cycle phases, the reviews and audits, and required actions/products to those necessary to conform with other AIS requirements.
- 4.2 Existence of the DOD-STD-7935A and DOD-STD-2167A standards sets. DOD-STD-7935A states its purpose as follows: "These standards provide guidelines for the development and revision of documentation for an AIS or applications software, and specifies the content of each of 11 types of documents that may be produced during the life cycle of an AIS." Use of DOD-STD-7935A and its associated Data Item Descriptions (DIDs) is required to document AIS in accordance with DODI 7935.1, "DOD Automated Data Systems Documentation Standards." Documents from other standards such as DOD-STD-2167A cannot be substituted.

The foreword of DOD-STD-2167A states that "This standard establishes requirements to be applied during the acquisition, development, or support of software systems. The requirements of this standard provide the basis for Government insight into a contractor's software development, testing, and evaluation efforts... This standard, together with other DOD and military documents ..., provides the means for establishing, evaluating, and maintaining quality in software and associated documentation... [Applicable] DIDs describe a set of documents for recording the information required by this standard."

The primary reason for the existence of the two standards sets is that each is intended to support specific types of applications. DOD-STD-7935A is intended to support AIS development in an environment where general purpose computers are used, prototyping or other iterative software development approaches which incorporate extensive user involvement are appropriate, and critical issues center on continuity of operations, security, the use of database management systems (DBMS), and the existence of quality user documentation. DOD-STD-2167A is intended to support the development of embedded systems which are composed of hardware and software and must operate in hostile environments where failures are critical and can involve loss of life. For these systems, the existence of technical development documentation and the disciplined application of configuration management As is apparent from this discussion, many of the principles is critical. characteristics of these two types of software systems (AIS and embedded systems) are different and must be developed and documented differently.

Appendix B lists the DOD Directives, Instructions, Standards, etc. that make up each of the standards sets.

4.3 Strengths of each of the standards sets. DOD-STD-7935A emphasizes documentation support for the variety of users of the AIS. In addition, it incorporates extensive assistance for acquisition personnel who must make a variety of decisions when applying the standard to a specific project. For example, guidelines are provided for helping to decide which documents to prepare based, on project complexity, when each document should be produced in the context of the AIS life cycle, and the relationship between the sizes of each of the sections within the document types.

DOD-STD-2167A incorporates requirements for software development management including formal reviews and audits, software engineering, formal qualification testing, software product evaluations, and configuration management.

4.4 Comparison of the life cycles of DOD-STD-7935A and DOD-STD-2167A. The support for different applications also means that the standards must function in the context of different acquisition processes. DOD-STD-7935A must follow the policies of the DOD 7000 series directives and instructions. DOD-STD-2167A must follow the policies of the DOD 5000 series directives and instructions. This results in the employment of different life cycles and terminology for each of the standards sets.

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The timeline in Figure 1 illustrates the relationship between the phases and stages of the DOD-STD-7935A acquisition process and the phases and activities of the DOD-STD-2167A acquisition process. The chart also shows the occurrence of major acquisition decision milestones, the points at which DOD-STD-7935A documents should be produced, and the occurrence of DOD-STD-2167A/MIL-STD-1521B formal reviews and audits.

4.5 Relationship between documents of DOD-STD-2167A and DOD-STD-7935A. Appendix C provides a mapping of the documentation of DOD-STD-7935A to the documents of DOD-STD-2167A. Specifically, for each DOD-STD-7935A document, the related DOD-STD-2167A data items are listed. The purposes and timing of the preparation of each of the documents is also included for comparison This mapping should not be interpreted as implying that the documents of DOD-STD-2167A and DOD-STD-7935A are technically equivalent. Information required by the DOD-STD-2167A documents but excluded from the related DOD-STD-7935A documents is highlighted in the mapping. the DOD-STD-7935A documents require information that is excluded from DOD-STD-2167A, this information is not highlighted since the assumption of the tailoring is that the DOD-STD-7935A documents will be used and therefore their benefits will be applied to the systems under development. DOD-STD-2167A documents that have no counterpart in DOD-STD-7935A are described at the end of the appendix. DOD-STD-7935A documents that have no counterpart in DOD-STD-2167A are easily identified by noting those that list no related DOD-STD-2167A documents.

DOD-STD-7935A

DOD-STD-2167A

Concepts Deve	Milestone elopment	O Decision Concept Demonstration/Validation
concepts Deve	, , , , , , , , , , , , , , , , , , ,	System Requirements Analysis
	Functional Description	• •
	Milestone	1 Decision
Design		System Design
Defini	tion	Full Scale Development Software Requirements Analysis
	System/Subsystem Specificatio	
	Sof	
Design	1 Pre	Preliminary Design
		eliminary Design Review (PDR) Detailed Design
	Software Unit Specification Database Specification	
		itical Design Review (CDR)
		II Decision
Development		
Develo	opment & Integration	Coding and CSU Testing CSC Integration and Testing
	Users Manual	3
	End User Manual	
	Computer Operation Manual	
	Maintenance Manual	
Test		
	Test Plan	
		est Readiness - Review (TRR)
Evalua		
	Test Analysis Report	
•••••••	F	unctional/Physical Configuration Audits
	24:1	(FCA/PCA)
Deployment	MITESIONE	III Decision
Deployment	Implementation Procedures	Production and Deployment
Operations	implementation indecautes	Operations Support
FIGURE	1. Comparison of the life cycl	les of DOD-STD-7935A and DOD-STD-2167A
Key to Figu	ire 1:	
	r Decision ner DOD 7000	& 5000 Series Directives and Instruction
DOD 7000 Se	eries Phase	DOD 5000 Series Phase
DOD 7000 Se		

DOD-STD-7935A

DOD-STD-2167A

End User Manual
high level overview
including equipment operation
(for interactive systems)

Software User's Manual for the "functional" user

Users Manual detailed instructions (for batch systems)

Computer Operation Manual for information processing center personnel

Maintenance Manual
e.g. file restoration, purging
history files, etc.
"maintenance runs"

Computer System Operator's Manual high level overview including equipment operation emphasizing diagnostics

Software Programmer's Manual
e.g., programming environment
and information

FIGURE 2. Comparison of the user documentation of DOD-STD-7935A and DOD-STD-2167A.

- 4.6 "Users" supported by documents of DOD-STD-7935A and DOD-STD-2167A. Figure 2 provides a comparison of the user documentation of DOD-STD-7935A and DOD-STD-2167A.
- 4.7 Criteria involved in decisions of whether or not to require specific Functional Areas, Major Activities, or Products. The Program Environment Description provided in Appendix D of this document, the tailoring guides provided in DOD-STD-7935A, Section 6.2.1 Documentation and project complexity, and the DOD-STD-2167A Tailoring Checklist provided in Appendix E of this document incorporate the key criteria upon which decisions to include or exclude specific Functional Areas, Major Activities, or Products should be based.
 - Item 4 of the Program Environment Description records cost, schedule and reliability constraints. If cost and schedule are critical, the tailoring process should strive for the minimum requirements in all areas. Care must be taken,

however, since minimization of development and documentation requirements may also increase the risk of failure. If the ultimate reliability of the system is critical, the tailoring process should strive for the maximum requirements in all areas -- to ensure the quality of all processes and products. Items 7 and 8 of the Program Environment Description relate to the size and complexity of the software and the acquisition strategy. The larger and more complex the system under development or the larger the number of organizations involved, the more important each of the functional areas, activities, and products become. Item 10 of the Program Environment Description questions the management approach for the contract. If strict controls are desired, virtually all functional areas, activities, and products should be required.

The Functional Areas of DOD-STD-2167A are the Software Product Evaluations, Formal Reviews and Audits, Formal Qualification Testing, and Configuration Item 3 of the Program Environment Description is concerned with whether or not the software is deliverable, The application of the functional areas would be expected to vary for deliverable software vs. nondeliverable software. Item 5a of the Program Environment Description records externally imposed requirements that would influence the tailoring For instance, if a higher level configuration management process or testing activity must be supported, the related functional areas should be Also important to the selection of functional areas are the dependencies internal to DOD-STD-2167A. Software Product Evaluations are conducted within the contractor organization in preparation for the Formal Reviews and Audits that are conducted with the sponsoring organization. Therefore, if Formal Reviews and Audits are desired, Software Product Evaluations should also be required. Formal Qualification Testing is totally dependent on the Test Plan and should only be required if that product is If Formal Qualification Testing is required, then the Test Analysis Report should be required to report the results.

The Major Activities consist of System Requirements Analysis/Design, Software Requirements Analysis, Preliminary Design, Detailed Design, Coding and Software Unit Testing, Subsystem and Integration Testing, AIS Testing, and System Integration and Testing. Item 1a of the Program Environment Description records the system life cycle phases of the contract. Using the information of item 1a in conjunction with Figure 1 of this document should make the selection of major activities relatively simple. Major activities that occur within life cycle phases of interest and produce products of interest should be required -- others should not. Decisions to require Software Product Evaluations and Formal Reviews and Audits should be limited to apply to those evaluations and reviews that coincide with the major activities of interest.

The selection of products should be heavily influenced by the application of the tailoring guides of DOD-STD-7935A, Section 6.2.1 Documentation and project complexity. In addition, items 1b and 1c of the Program Environment Description record those products to be inherited from others and those to be transitioned to others. More products would be expected to be of interest if the contract is a new development rather than a modification effort (item 2 of the Program Environment Description) and if the software is to be supported by an organization other than the original developer (item 9 of the Program Environment Description). If strict controls on contractor methods are desired (item 10 of the Program Environment Description), the Software Development Plan should be an absolute requirement.

The nabove discussions illustrates the importance of the final step of the tailoring process as described in the next section -- namely, that of carefully reviewing the resulting standards, documentation requirements, and contractual documents for consistency and appropriateness of tailoring decisions.

5. TAILORING PROCEDURES

- Tailoring aids. This section provides a 5-step method for tailoring DOD-STD-2167A for use in concert with DOD-STD-7935A for AIS development. The instructions in this section refer to a set of questionnaires, checklists, and reference documents to facilitate the tailoring process. These tailoring aids help you describe the context for the your decisions, check for inconsistencies, and create a record of your tailoring decisions for future reference. The tailoring aids are included as appendixes of this handbook. Local reproduction of the aids is authorized.
- 5.2 STEP 1: Select DOD-STD-7935A documents. The first step in preparing to tailor DOD-STD-2167A for use in conjunction with DOD-STD-7935A is to apply the tailoring chart provided in DOD-STD-7935A, Section 6.2.1 Documentation and project complexity. The result is the identification of the set of technical documents to be prepared. DOD Component requirements must also be considered in identifying this set of documents.
- 5.3 STEP 2: Establish program context, objectives, and characteristics. The result of Step 1 should be used as input to the preparation of the Program Environment Description provided in Appendix D of this document. The Program Environment Description is designed to help you define the environment in which the software is being developed. Your answers provide a frame of reference for the remainder of the tailoring activity.
- 5.4 STEP 3: Complete tailoring checklist and attach to Statement of Work. Once Step 2 is complete, the DOD-STD-2167A Tailoring Checklist provided in Appendix E should be completed, paying special attention to the notes that are provided to ensure consistency of responses. The completed checklist should be attached to a Statement of Work that requires compliance with both DOD-STD-7935A and DOD-STD-2167A.
- 5.5 <u>STEP 4</u>; <u>Tailor DOD-STD-7935A</u>, as needed. If any of the documents of DOD-STD-7935A are not required, appropriate tailoring instructions for DOD-STD-7935A should be included in the Statement of Work. The DOD-STD-2167A Tailoring Checklist only provides tailoring actions for DOD-STD-2167A and its associated standards and documents.
- 5.6 <u>STEP 5: Carefully review tailoring decisions.</u> The final step of the tailoring process is to carefully review the resulting standards, documentation requirements and contractual documents for consistency and appropriateness of tailoring decisions.

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APPENDIX A LIST OF ABBREVIATIONS AND ACRONYMS

10.1 <u>Purpose</u>. This appendix provides a list of all acronyms and abbreviations used in this handbook, with the associated meaning.

10.2 Acronyms.

PT

Test Plan

	<u> </u>
ADP	Automated Data Processing
AIS	Automated Information System
CDR	Critical Design Review
CDRL	Contract Data Requirements List
CRISD	Computer Resources Integrated Support Document
C2C	Computer Software Component
CSCI	Computer Software Configuration Item
CSDM	Computer System Diagnostic Manual Computer Software Operator's Manual
CSOM	Computer Software Operator's Manual
CSU	Computer Software Unit
C_3I	Command, Control, Communications and Intelligence
DBDD	Data Base Design Document
DBMS	Database Management System
DID	Data Item Description
DOD	Department of Defense
DODC	Department of Defense Directive
DODI	Department of Defense Instruction
DOD-STD	Department of Defense Standard
DS	Database Specification
ECP -	Engineering Change Proposal
EM	End User Manual
EPROM	Erasable Programmable Read Only Memory
PCA	Functional Configuration Audit
FD	Functional Description
FIPS	Federal Information Processing Standard
FQR	Formal Qualification Review
RQT	Formal Qualification Testing
FSM	Firmware Support Manual
GHE	Government Furnished Equipment
HWCI	Hardware Configuration Item
IDD	Interface Design Document
IP	Implementation Procedures
IRS	Interface Requirements Specification
IV&V	Independent Verification and Validation
ILCSC	Low Level Computer Software Component
MIL-STD	Military Standard
MM	Maintenance Manual
∞	Operational Concept Document
CM	Computer Operation Manual
PCA	Physical Configuration Audit
PDR	Preliminary Design Review
PROM	Programmable Read Only Memory
DT	Test Plan

ROM Read Only Memory List in water in RT Tes: Analysis Report Research and Development R&D Specification Change Notice SCN 45% E Software Design Document SDD Software Detailed Design Document 350 mm SDDD Software Development File SDF Softwere Development Plan SDP System Design Review SDR Software Programmer's Manual Software Product Specification **SPM** SPS System Requirements Review SRR Software Requirements Specification SRS System/Subsystem Specification SS System/Segment Design Document SSDD Software Specification Review SSR System/Segment Specification SSS Software Test Description
Software Top Level Design Document STD STLDD Software Test Plan STP Software Test Report STR Software User's Manual SUM Top Level Computer Software Component TLCSC Test Readiness Review TRR UM Users Manual US Software Unit Specification United States Air Force USAF

Version Description Document

VDD

APPENDIX B DOD-STD-7935A AND JOD-STD-2167A STANDARDS SETS

10.1 Purpose. This appendix provides a list of the DOD Directives, Instructions, Standards, etc. that make up the DOD-STD-7935A and DOD-STD-2167A standards sets.

10.2 DOD-STD-7935A standard set.

ada a transfer

DOD-STD-7935A, "DOD Automated Information Systems (AIS) Documentation Standards," 31 Oct 88

Associated DIDs

DODI 7935.1, "DOD Automated Data Systems Documentation Standards," 13 Sep 77

DODD 7920.1; "Life Cycle Management of Automated Information Systems," 20 Jun 88

DODI 7920.2, "Major Automated Information System Approval Process," 07 Mar 90

DODI 7920.4, "Baselining of Automated Information Systems (AIS)," 21 Mar 88

DODD 5200.28, "Security Requirements for Automated Information Systems (AISs)," 21 Mar 88

DOD Standard 5200.28-STD, "DOD Trusted Computer System Evaluation Criteria," 26

DOD 5200.1-R, "DOD Information Security Program," 07 Jun 82

DOD Manual 5200.28-M, "ADP Security Manual (C³I)," Jan 73

DODD 5400-11, "DOD Privacy Program," 09 Jun 82

DODD 3020.26, "Continuity of Operations Policies and Planning," 24 Oct 85

DODI 7041.3, "Economic Analysis and Program Evaluation for Resource Management," 18 Oct 72

FIPS PUE 11-2, "Guideline: American National Dictionary for Information Processing"

10.2 DOD-STD-2167A standard set.

DOD-STD-2167A, "Defense System Software Development," 29 Feb 88

Associated DIDs

- MIL-STD-1521B, "Technical Reviews and Audits for Systems, Equipments, and Computer Software," 04 Jun 85
- MIL-STD-499A (USAF), "Engineering Management," 01 May 74
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- DOD-STD-480A, "Configuration Control Engineering Changes, Deviation, and Waivers," 12 Apr 78
- MIL-STD-481, "Configuration Control Engineering Changes, Deviations, and Waivers (Short Form)"
- MIL-STD-483A (USAF), "Configuration Management Practices for Systems, Equipment, Munitions, and Computer Programs," 04 Jun 85
- MIL-STD-490A, "Specification Practices," 04 Jun 85
- MIL-HDBK-287, "A Tailoring Guide for DOD-STD-2167A, Defense System Software Development," 11 Aug 89

APPENDIX C DOD-STD-7935A DOCUMENTATION MAPPING

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10.1 <u>Purpose</u>. This appendix provides a mapping of the documentation of DOD-STD-7935A to the documents of DOD-STD-2167A.

10.2 Functional Description (FD) [DI-IPSC-80689].

a. <u>Purpose:</u> The FD is written to provide: a. The system requirements to be satisfied which will serve as a basis for mutual understanding between the user and the developer. b. Information on performance requirements, preliminary design considerations, and user impacts including fixed and continuing costs. c. A basis for development of system tests.

A detailed Functional Description is usually developed during the Concepts Development Phase and completed for the Milestone II decision. It is the baseline for development and must be placed under configuration management controls.

b. Related DOD-STD-2167A Documents.

System/Segment Specification (SSS) [DI-CMAN-80008] - The SSS specifies the requirements for a system or a segment of a system. Upon Government approval and authentication, the SSS becomes the Functional Baseline for the system or segment. The SSS also provides a general overview of the system or segment that may be used by training personnel, support personnel, or other users_of_the_system.

The SSS is usually started during System Requirements Analysis and finalized during System Design.

c. Additional Information Required by DOD-STD-2167A. Requirements pertaining to Human Engineering, GFE Usage, Reserve Capacity, Logistics, Precedence of Requirements, and Qualification.

10.3 System/Subsystem Specification (SS) [DI-IPSC-80690].

a. <u>Purpose.</u> The SS is written to fulfill the following objectives: a. To provide a detailed definition of the system/subsystem functions. b. To communicate details of the on-going analysis between the user's operational personnel and the appropriate development personnel. c. To define in detail the interfaces with other systems and subsystems and the facilities to be utilized for accomplishing the interfaces.

The SS is usually developed during the Design Phase/Definition Stage.

b. Related DOD-STD-2167A Documents.

System/Segment Design Document (SSDD) [DI-CMAN-80534] - The SSDD describes the design of a system/segment and its operational and support

environments. It describes the organization of a system or segment as composed of HWCIs, CSCIs, and manual operations. The SSDD contains the highest level design information for the system or segment. The SSDD describes the allocation of system requirements to HWCIs, CSCIs, and manual operations. The SSDD describes the characteristics or each HWCI and CSCI to the Government. The SSDD is used by the contractor for two primary purposes, namely: a present the system design at the SDR, b use the design information as the basis for development the SRS for each CSCI, the IRSs for the system, and the requirements specification for each HWCI. The SSDD is used by the government to assess the design of a system or segment. The SSDD provides an overview of the system or segment that may also be used by training personnel, support personnel, or users of the system.

The SSDD is usually developed during System Design.

Software Requirements Specification (SRS) [DI-MCCR-80025] - The SRS specifies the engineering and qualification requirements for a CSCI. The SRS is used by the contractor as the basis for the design and formal testing of a CSCI. The SRS specifies the requirements allocated to a CSCI and enables the Government to assess whether the completed CSCI complies with those requirements. Upon Government approval and authentication, the SRS becomes part of the Allocated Baseline.

The SRS is usually started during System Design and finalized during Software Requirements Analysis.

Interface Requirements Specification (IRS) [DI-MCCR-80026] - The IRS specifies the requirements for one or more interfaces between one or more CSCIs and other configuration items or critical items. The IRS specifies the requirements for the interface(s) and enables the Government to assess whether the implementation of the interface(s) complies with those requirements. Upon Government approval and authentication, the IRS becomes the joint configuration control device for the interface(s) and becomes part of the Allocated Baseline. The IRS is used by the contractor(s) as the basis for development of the interface(s).

The IRS is usually started during System Design and finalized during Software Requirements Analysis.

c. Additional Information Required by DOD-STD-2167A. Requirements pertaining to the Support Environment, Human Engineering, Qualification Requirements, and Preparation for Delivery.

10.4 Software Unit Specification (US) [DI-IPSC-80691].

a. <u>Purpose</u>. The objective of a US is to describe the software unit design in sufficient detail to permit software production.

The US is usually developed during the Design Phase/Design Stage.

b. Related DOD-STD-2167A Documents.

Software Design Document (SDD) [DI-MCCR-80012] - The SDD describes the complete design of a CSCI. It describes the CSCI as composed of CSCs and CSUs. The SDD describes the allocation of requirements from a CSCI to its CSCs and CSUs. Prior to PDR, the SDD is entered into the Developmental Configuration for the CSCI. Upon completion of PCA, the SDD, as part of the SPS, is entered into the Product Baseline for the CSCI. The SDD is used by the contractor for three primary purposes, namely: a. present the preliminary design at the PDR(s), b. present the detailed design at the CDR(s), and c. use the design information as the basis for coding each CSU. The SDD is used by the Government to assess the preliminary and detailed design of a CSCI.

The SDD is usually started during Preliminary Design and finalized during Detailed Design.

Interface Design Document (IDD) [DI-MCCR-80027] - The IDD specifies the detailed design for one or more interfaces between one or more CSCIs and other configuration items or critical items. The IDD and its companion IRS serve to communicate and control interfaces design decisions to the Government. Upon completion of PCA, the IDD becomes a part of the Product Baseline. The IDD is used by the contractor(s) as a basis for software design of the interface(s). The IDD is used by the Government to assess the design of the interfaces documented in the IRS.

The IDD is usually started during Preliminary Design and finalized during Detailed Design.

c. Additional Information Required by DOD-STD-2167A. Design for Handling Interrupts/Signals, Legality Checks of Internal Data Elements, Message Descriptions, Interface Priorities, and Detailed Information on Communications Protocols.

10.5 Database Specification (DS) [DI-IPSC-80692].

a. <u>Purpose.</u> The objectives of a DS are to describe the database organization and storage allocation and to provide the detailed data model of the logical and physical design and information that would be necessary for the construction of the parts of the database such as areas, records, sets, tables, and associated dictionaries, directories, and diagrams.

The DS is usually developed during the Design Phase/Design Stage.

- b. Related DOD-STD-2167A Documents. None.
- c. Additional Information Required by DOD-STD-2167A. None.

10.6 Users Manual (UM) [DI-IPSC-80693].

a. <u>Purpose</u>. The objective of a UM is to provide the information necessary for the user to effectively use the automated information system.

The UM is usually developed during the Development Phase/Development and Integration Stage.

b. Related DOD-STD-2167A Documents.

Software User's Manual (SUM) [DI-MCCR-80019] - The SUM provides user personnel with instructions sufficient to execute one or more related CSCIs. The SUM provides the steps for executing the software, the expected output, and the measures to be taken if error messages appear. The information required by this DID is directed to the functional user of the CSCI(s), as opposed to the operator of the computer system. If this distinction does not exist, the user will need to refer to both the CSOM and the SUM to operate the computer system and to use the CSCI(s).

The SUM is usually finalized during CSCI Testing.

c. Additional Information Required by DOD-STD-2167A. None.

10.7 End User Manual (EM) [DI-IPSC-80694].

a. <u>Purpose</u>. The objective of the EM is to provide the end user with the information necessary to use the system effectively, including operation of (identification of terminal or personal computer) equipment.

The EM is usually developed during the Development Phase/Development and Integration Stage.

b. Related DOD-STD-21.7A Documents.

Software User's Manual (SUM) [DI-MCCR-80019] - The SUM provides user personnel with instructions sufficient to execute one or more related CSCIs. The SUM provides the steps for executing the software, the expected output, and the measures to be taken if error messages appear. The information required by this DID is directed to the functional user of the CSCI(s), as opposed to the operator of the computer system. If this distinction does not exist, the user will need to refer to both the CSOM and the SUM to operate the computer system and to use the CSCI(s).

The SUM is usually finalized during CSCI Testing.

c. Additional Information Required by DOD-STD-2167A, None.

10.8 Computer Operation Manual (OM) [DI-IPSC-80695].

Purcose. The objective of an OM is to provide computer control personnel and computer operators in an information processing center with a detailed operational description of the system and its associated environment with which they will be concerned during the performance of their duties.

The OM is usually developed during the Development Phase/Development and Integration Stage.

- b. Related DOD-STD-2167A Documents, None.
- c. Additional Information Required by DOD-STD-2167A. None.

10.9 Maintenance Manual (MM) [DI-IPSC-80696].

a. <u>Purpose</u>. The objective of the MM is to provide the maintenance programmer personnel with the information necessary to effectively maintain the system.

The MM is usually developed during the Development Phase/Development and Integration Stage.

- b. Related DOD-STD-2167A Documents. None.
- c. Additional Information Required by DOD-STD-2167A. None.

10.10 Test Plan (PT) [DI-IPSC-80697].

a. Purpose. The PT is written to fulfill the following objectives: a. To provide guidance for the management and technical effort necessary throughout the test period. b. To establish a comprehensive test plan and to communicate the nature and extent of the tests deemed necessary to provide a basis for evaluation of the system. c. To coordinate an orderly schedule of events, a specification of equipment and organizational requirements, the methodology of testing, a list of materials to be delivered, and a schedule of user orientation. d. To provide a written record of the actual test inputs to exercise system limits and critical capabilities, the instructions to permit execution of tests, and the expected outputs.

Preparation of the PT is usually begun during the Design Phase/Design Stage and completed during the Development Phase/Test Stage.

b. Related DOD-STD-2167A Documents.

Software Test Plan (STP) [DI-MCCR-80014] - The STP describes the formal qualification test plans for one or more CSCIs. The STP identifies the software test environment resources required for FQT and provides schedules for FQT activities. In addition, the STP identifies the individual tests that shall be performed during FQT. The STP enables the Government to assess the adequacy of planning for FQT activities.

The STP is usually developed during Preliminary Design.

Software Test Description (STD) [DI-MCCR-80015] - The STD contains the test cases and test procedures necessary to perform formal qualification testing of a CSCI identified in the STP. The STD enables the Government to assess the adequacy of the test cases and procedures to be performed during CSCI testing.

The STD is usually begun during Detailed Design and finalized during CSC Integration and Testing.

c. Additional Information Required by DOD-STD-2167A. Proprietary Nature and Government Rights to Software Test Environment (Including Installation, Testing and Control of Software Test Environment), Identification of Test Classes, and Description of Evaluation Criteria concerned with Inconclusive Conditions.

10.11 Test Affalysis Report (RT) [DI-IPSC-80698].

a. Purpose. The RT is written to fulfill the following objectives: a. To document the results of the test. b. To provide a basis for assigning responsibility for deficiency correction and follow-up. c. To provide a basis for preparation of a statement of project completion. d. To establish user confidence in the operation of the system.

The RT is usually developed during the Development/Evaluation Stage.

b. Related DOD-STD-2167A Documents.

Software Test Report (STR) [DI-MCCR-80017] - The STR is a record of the formal qualification testing performed on a CSCI. The STR provides the Government with a permanent record of the formal qualification testing performed on a CSCI. The STR may be used by the contractor as a basis for re-testing of a CSCI.

The STR is usually developed during CSCI Testing.

c. Additional Information Required by DOD-STD-2167A. Test Overview (including Test Summary and Test Record for each Test) and Detailed Test Results.

10.12 Implementation Procedures (IP) [DI-IPSC-80699].

a. <u>Purpose</u>. The objective of the IP is to provide the necessary information to the functional users and data processing personnel to accomplish the installation of a previously tested AIS and to achieve operational status at additional sites.

Preparation of the IP is usually begun during the Development Phase/Development and Integration Stage and completed during the Deployment Phase.

- b. Related DOD-STD-2167A Documents. None.
- c. Additional Information Required by DOD-STD-2167A. None.

10.13 Additional DOD-STD-2167A Documents.

Software Development Plan (SDP) [DI-MCCR-80030] - The SDP describes a contractor's plans for conducting software development. The SDP is used to provide the Government insight into the organization(s) responsible for

performing software development and the methods and procedures to be followed by these organization(s). The SDP is used by the Government to monitor the procedures, management, and contract work effort of the organizations performing software development.

The SDP is usually developed prior to the initiation of Software Requirements Analysis.

Computer System Operator's Manual (CSOM) [DI-MCCR-80018] - The CSOM provides information and detailed procedures for initiating, operating, monitoring, and shutting down a computer system and for identifying/isolating a malfunctioning component in a computer system. A CSOM is developed for each computer system in which one or more CSCIs execute.

The CSOM is usually finalized during CSCI Testing.

Computer Resources Integrated Support Document (CRISD) [DI-MCCR-80024] - The CRISD provides the information needed to plan for life cycle support of deliverable software. The CRISD documents the contractor's plans for transitioning support of deliverable software to the support agency. The CRISD is used by the Government for updating the Computer Resources Life Cycle Management Plan.

The CRISD is usually finalized during CSCI Testing.

Software Programmer's Manual (SPM) [DI-MCCR-80021] - The SPM provides information needed by a programmer to understand the instruction set architecture of the specified host and target computers. The SPM provides information that may be used to interpret, check out, troubleshoot, or modify existing software on the host and target computers.

The SPM is usually finctized during CSCI Testing

Firmware Support Manual (FSM) [DI-MCCR-80022] - The FSM provides the information necessary to load software or data into firmware components of a system. It is equally applicable to ROMs, PROMs, EPROMs and other firmware devices. The FSM describes the aspects of the firmware devices, support software, support equipment, and the procedures required to load software into firmware devices to verify the load process and to test the firmware device for proper functioning.

The FSM is usually finalized during CSCI Testing.

Software Product Specification (SPS) [DI-MCCR-80029] - The SPS consists of the SDD and source code listings for a CSCI. Upon Government approval and authentication following the PCA, the SPS establishes the Product Baseline for the CSCI. Until establishment of the Product Baseline, the contents of the SPS are contained in the contractor's Developmental Configuration for the CSCI. The SPS is used by the Government to establish the Product Baseline.

The SPS is usually finalized during CSCI Testing or may be deferred until after System Integration and Testing.

Version Description Document (VDD) [DI-MCCR-80013] - The VDD identifies and describes a version of a CSCI The VDD is used by the contractor to release CSCI versions to the Government. The term "version" may be applied to the initial release of a CSCI, to a subsequent release of that CSCI, or to one of multiple forms of the CSCI released at approximately the same time (e.g., to different sites). The VDD is used by the Government to track and control versions of software to be released to the operational environment.

The VDD is usually finalized during CSCI Testing or may be deferred until after System Integration and Testing.

Specification Change Notice (SCN) [DI-E-3134] - SCNs are usually developed on an as needed basis.

Engineering Change Proposal (ECP) [DI-E-3128] - ECPs are usually developed on an as needed basis.

APPENDIX D PROGRAM ENVIRONMENT DESCRIPTION

INSTRUCTIONS: Complete the following items to record the program context, objectives and characteristics for reference during the remainder of the tailoring activity.

1.	CU	RRENT	SYSTEM	LIFEC	YCLEF	HASE.							
	a.	Check	the syst	em life	cycle	phases	to w	nich th	e conti	act wi	ill appl	y:	
			Need J	ustifica	tion	_	I	Peveloj	pment				
			Concept	s Dev	elopme	nt _	I	Peploy	ment				
			Design			_	(perati	ons				
	b.	develo	the soft ped unde ped on	r a pa	rallel c	ontract,	will be or pro	inheri ovided	ited fro as GFI	om a E and	previou need n	s contractor of be	ct,
		FD	SS	US	DS	UM	EM	CM	MM	PT	RT	IP	
		SDP	CRISD	CSOM	SPM	FSM	SPS	VDD	Code	None	;		
	C.	delive:	the soft ct or sy- rable pro- ble as a	stem li: oducts)	fe cycl and th	e phas ierefore	e (vs. must	R&D-t	ype "th	row-av	vay" oi	non-	
		FD	SS	US	DS	UM	EM	OM	MM	PT	RT	IP	
		SDP	CRISD	CSOM	SPM	FSM	SPS	VDD	Code	None	;		
		conjur	OOD-STD action wi ing app	th DO	D Con	ponent	imple	mentati nentatio	ion and on inst	proje ruction	ct comp is, as	plexity, i a guide	n in
2.	NE	W DEV	ELOPME	NT VS. J	MODIFI	CATIO	7.						
	Ch	eck wi	nich type	of pro	ject it	will b	e:						
		_ a.	Develop	new	softwa	ге		b. 1	Modify	existi	ng sof	tware	
		_ c.	Other			 -							

3.	DE	LIVERA	ABLE AND	NON-DELIVERABLE SOFTWARE.
			type of t	the software:
	. ,	a.	Deliverab	b. Non-deliverable
		_ c.	Other	
4.	CO	ST. SCI	EDULE, AI	ND RELIABILITY CONSTRAINTS.
	a.	Check	the cost-	criticality of the software:
			High:	Keeping cost down is the highest priority
			Medium:	Cost is important but so are correctness, supportability, etc
			Low:	Cost is a low priority compared to correctness, supportability, etc.
	b.	Check	the schee	dule-criticality of the software:
			High:	•
			Medium:	consequences Schedule slips would be inconvenient, but not disastrous
			Low:	Schedule slips would have no impact
	c.	Check	the corre	ectness-criticality of the software:
			High:	Incorrect operation would threaten life or property
			Medium:	Incorrect operation would affect mission fulfillment
			Low:	Incorrect operation would cause inconvenience or other lesser effects
5.	ΕΣ	CTERNA	ALLY IMPO	SED REQUIREMENTS/POLICIES.
	a.		ate which software:	system-level requirements must be considered in developing
			System (

	b. Indicate which policies must be considered in developing the software:
	IV&V required Memory reserves required Use of Ada required Safety analysis required Other
6.	DESIGN METHODOLOGY.
	Indicate any design methodology to be required or precluded on this project:
	a. Required b. Precluded c. No limitations
7.	SIZE AND COMPLEXITY OF SOFTWARE.
	a. Circle the maximum estimated size of the development team during this contract (ref. DOD-STD-7935A, Figure 6-1, Item 6):
	1 1-2 3-5 6-10 11-18 19 and over
	b. Circle the proposed size of the software (in estimated lines of code): <1K >1K - <=10K >10K - <=100K >100F <=1M >1M
8.	ACQUISITION STRATEGY.
	Indicate yes or no for the following issues regarding the acquisition strategy for the contract:
	a. Subcontracting will be permitted.
	b. There will be an IV&V contractor or IV&V agent.
	c. There will be division of software development roles among contractors
	d. Formal reviews and audits will be used as project milestones.
	e. The hardware for this acquisition already exists.
	f. There will be parallel contracts in early phases of the acquisition.

9.	SUPPL	KI	CONCEPT.
	Check	the	e selected support concept:
-		a.	The developer will support the software.
-		b.	The software will be supported by Government support agencies or a support contractor.
		c.	The software does not need to be supported (as in a prototype or R&D effort).
10.	M	ANA	GEMENT APPROACH.
	Inc	lica	te the overall management approach for the contract:
-		a.	Strict controls on contractor methods and activities.
		b.	State product requirements and let contractor fulfill them in his own way.
		c.	Other

APPENDIX E DOD-STD-2167A TAILORING CHECKLIST

PURPOSE: To provide a checklist to use in tailoring DOD-STD-2167A (1) so that the technical documentation produced will conform with the technical documentation required by DODD 7920.1, "Life Cycle Management of Automated Information Systems" and (2) to select the functional areas, activities, products, and software management and engineering practices to be required on this project.

INSTRUCTIONS: Specify true or false for each of the following statements to select DOD-STD-2167A, MIL-STD-1521B, and applicable Data Item Descriptions (DIDs) tailoring options for inclusion in the Statement of Work.

NOTE: When no subject is specified for a tailoring action, the item to be tailored is DOD-STD-2167A. When MIL-STD-1521B or a DID such as that of the Software Development Plan (SDP) is to be tailored, the subject of the tailoring is specifically identified.

1. Terminology

The following terminology shall be used as a part of this project. This applies to DOD-STD-2167A, MIL-STD-1521B, and all applicable DIDs).

- The term Software Unit [DOD-STD-7935A] shall be used as a part of this project, as opposed to Computer Software Unit (CSU) [DOD-STD-2167A].
- False ⇒ No-action required.
- True > Replace all references to Computer Software Units (CSUs) with Software Units.
- 1.2 The term Subsystem [DOD-STD-7935A] shall be used as a part of this project, as opposed to Computer Software Component (CSC) [DOD-STD-2167A].
- False = No action required.
- True > Replace all references to Computer Software Components (CSCs) with Subsystems
- 1.3 The term Automated Information System (AIS) [DOD-STD-7935A] shall be used as a part of this project, as opposed to Computer Software Configuration Items (CSCIs) [DOD-STD-2167A].
- False > No action required.
- True > Replace all references to Computer Software Configuration Items (CSCIs) with Automated Information System (AIS).

2. Functional Areas

Performance of activities as specified in the following functional areas shall be required of the contractor as a part of this project. (Note: If you answer false, all items related to the specified functional area will be tailored out. If you answer true, you will be given an opportunity to selectively tailor the application of the functional areas to individual products in Section 5.)

- 2.1 The performance of Software Product Evaluations shall be required of the contractor as a part of this project. (Note: The results of this process are used as input to the Formal Reviews and Audits.)
 - False \Rightarrow 4.4 Delete entire paragraph
 - 4.4.1 Delete entire paragraph.
 - 4.4.2 Delete entire paragraph.
 - 4.4.3 Delete entire paragraph.
 - 4.4.4 Delete entire paragraph.
 - 5.1.4 Delete entire paragraph and Figure 4
 - 5.2.4 Delete entire paragraph and Figure 5
 - 5.3.4 Delete entire paragraph and Figure 6
 - 5.44 Delete entire paragraph and Figure 7
 - 5.54 Delete entire paragraph and Figure 8
 - 5.6.4 Delete entire paragraph and Figure 9
 - 574 Delete entire paragraph and Figure 10
 - 5.8.4 Delete entire paragraph and Figure 10

Appendix D Delete entire appendix.

SDP 10.2.8 Delete entire paragraph and all subparagraphs

True > Continue.

- 2.1.1 Independent evaluators shall be used.
 - ___ False \Rightarrow 4.41 Delete entire paragraph
- ___ True > No action required.
- 2.1.2 Deliverables shall be internally coordinated.
- ___ False \Rightarrow 4.4.2 Delete entire paragraph
- ___ True > No action required.
- 2.1.3 DOD-STD-2167A evaluation criteria shall be used.
 - __ False \Rightarrow 4.4.4 Delete entire paragraph.
 - 5.1.4 Delete reference to Figure 4
 - 5.2.4 Delete reference to Figure 5
 - 5.3.4 Delete reference to Figure 6
 - 5.4.4 Delete reference to Figure 7
 - 5.5.4 Delete reference to Figure 8
 - 5.6.4 Delete reference to Figure 9
 - 5.74 Delete reference to Figure 10
 - 5.8.4 Delete reference to Figure 10

App D Delete entire appendix.

True > App D.10.3.1 Delete entire paragraph.

2.1.4 Records of evaluations shall be kept.

False ⇒ 4.4.3 Delete entire paragraph. SDP 10.2.8.4 Delete entire paragraph.

True > No action required.

True > Fig 2

2.2 The performance of Formal Reviews and Audits shall be required of the contractor as a part of this project. (Note: If you answer false, all items related to Formal Reviews and Audits will be tailored out. If you answer true, you will be given an opportunity to selectively tailor the application of Formal Reviews and Audits. Each of the Formal Reviews and Audits is to be conducted in accordance with MIL-STD-1521B. The application of MIL-STD 1521B during the development of an AIS will require very careful tailoring to remove non-applicable items. The tailoring recommended here is only that sufficient to use MIL-STD-1521B with DOD-STD-7935A.)

```
False \Rightarrow 4.1.2
                   Delete entire paragraph and Figures 1 and 2
          511.1
                    Delete entire paragraph.
          5112
                    Delete entire paragraph.
          5 2.1
                    Delete entire paragraph.
          5.2.4
                    Delete reference to Software Specification Review(s)
          5.3.1
                    Delete entire paragraph.
          5.3.4
                    Delete reference to Preliminary Design Review(s).
          5.4.1
                    Delete entire paragraph.
          5.4.4
                    Delete reference to Critical Design Review(s).
          5.5.1
                    Delete entire paragraph.
          5.6.1
                    Delete entire paragraph.
          5.6.4
                    Delete reference to Test Readiness Review(s).
          5.7.1
                    Delete entire paragraph.
          5.7.2.3
                    Delete first sentence.
       5.7.5.2
                    Delete reference to Functional Configuration Audit and
                    Physical Configuration Audit.
          5.8.1
                    Delete entire paragraph.
   SDP 10.2.5.8
```

Delete entire paragraph.

Replace references to System Specification with Functional Description Delete reference to System/Segment Design Document. Replace references to Software Requirements Specification(s) with System/Subsystem Specification(s). Delete references to Interface Requirements Specification. Replace references to Software Design Document(s) with Software Unit Specification(s). Replace references to Software Test Plan with Test Plan. Replace references to Interface Design Document with Database Specification. Replace references to Software Test Description(s) with Test Plan.

Replace references to Software Test Report(s) with Test Analysis, Report.

2.2.1 System Requirements Review (SRR) shall be supported. False $\Rightarrow 5.1.1.1$ Delete entire paragraph. True ⇒ MIL-STD-1521B: 10.1 Replace reference to Concept Exploration or Demonstration and Validation phase with Need Justification or Concepts Development phase. 10.2 Replace reference to system/segment requirements with functional description Replace reference to system/segment specification 10.3.1.3 with functional description 2.2.2 System Design Review (SDR) shall be supported. False $\Rightarrow 5.1.1.2$ Delete entire paragraph. True ⇒ MIL-STD-1521B: 20.1 Replace reference to system/segment requirements with functional description 20 1 a Replace reference to System/Segment Specification with Functional Description 20.1.c Delete entire statement. 20.1.d Replace reference to Preliminary Software Requirements Specification with Preliminary System/Subsystem Specification 20.1.e Delete entire statement. 20.2 Replace references to Demonstration and Validation Phase with Concepts Development Phase Replace reference to Full Scale Development Review with Design and Development Review Replace reference to System/Segment Specification with Functional Description. 20.2.1 Replace reference to System/Segment Specification with Functional Description. 20.3.7.b Replace reference to System/Segment Specification with Functional Description. 20.3.8 Delete reference to Operational Concept Document. Replace "sections 1.0, 2.0, 30, 50, 60, and 100 of the System/Segment Specification" with "Functional Description." Replace reference to Software Requirements Specification with System/Subsystem Specification Delete reference to Interface Requirements Specifications. 20.3.9 Delete reference to Software Requirements and Interface Requirements Specifications. 20.3.11.a Delete entire statement. 20.3.13 Replace reference to Software Requirements Specifications with System/Subsystem Specifications.

Delete reference to Interface Requirements Specifications.

2.2.3 Software Specification Review (SSR) shall be conducted.

- __ False \Rightarrow 5.2.1 Delete entire paragraph.
 - 5.2.4 Delete reference to SW Specification Review(s).
- ___ True \(\Rightarrow\) 5.2.1 Replace reference to Software Requirements
 Specifications (SRSs) with System/Subsystem
 Specification (SS).
 Delete reference to Interface Requirements
 Specification (IRS).

MIL-STD-1521B:

- 3.3 Replace reference to system, segment, or prime item level requirements with functional description.
 Replace reference to Software Requirements
 Specification with System/Subsystem Specification.
 Delete reference to Interface Requirements
 Specification and Operational Concept Document.
- 301 Replace references to Software Requirements
 Specification with System/Subsystem Specification.
 Delete references to Interface Requirements
 Specification(s) (IRSs) and the Operational Concept
 Document (OCD).
- 30 2.e Delete entire statement.
- 30.2.f Delete entire statement.

2.2.4 Preliminary Design Review (PDR) shall be conducted.

- False = 5.3.1 Delete entire paragraph.
 - 5.3.4 Delete reference to Preliminary Design Review(s).
- True \Rightarrow Add new paragraph to DOD-STD-2167A:
 - 5.3.2.5 The contractor shall produce preliminary versions of the software support and operational documentation.

MIL-STD-1521B:

- 40.1 Replace references to the Software Top Level Design Document (STLDD) with Software Unit Specifications (USs) and the Database Specification (DS). Replace references to the Software Test Plan (STP) with the Test Plan (PT). Replace references to the Computer System Operator's Manual (CSOM), Software User's Manual (SUM), Computer System Diagnostic Manual (CSDM), and Computer Resources Integrated Support Document (CRISD) with all support and operational documentation.
- 40.2.2.a Replace reference to Software Requirements
 Specification with System/Subsystem Specification.
 Delete reference to Interface Requirements
 Specification(s).

_	
* (****	Replace references to Top-Level Computer Software
	Components' (TLCSCs) with subsystems.
. 40.2.2.b	Replace reference to TLCSCs with subsystems
40.2.2.h	Replace references to TLCSC with subsystem.
40.2.2.n	Replace reference to the CSOM, SUM, CSDM, and
	CRISD with operation and support documents.
40.3.2.a	CRISD with operation and support documents. Replace reference to Software Requirements
	Specification with System/Subsystem Specification
	Delete reference to Interface Requirements
1846 . 11	Delete reference to Interface Requirements Specification(s). Penlace reference to Software Requirements
40.3.2.b	Replace reference to Software Requirements
•	Specification with System/Subsystem Specification
	Delete reference to Interface Requirements
	Specification(s)
40.5.1	Delete reference to Software Requirements
	Specification(s)
40.6.1	Delete reference to Software Requirements
	Specification(s)
40.7.2	Delete reference to Software Requirements
•	Specification(s).
49.7.3	Delete reference to Software Requirements
	Specification and Interface Requirements
	Specification(s).
40.13.1	Delete entire paragraph
40.13.3	Delete entire paragraph

2.2.5 Critical Design Review (CDR) shall be conducted.

40.13.4

40.13.8

40.16.1

False \Rightarrow 5.4.1 Delete entire paragraph. 5.4.4 Delete reference to Critical Design Review(s)

Delete entire paragraph.

Delete entire paragraph

Delete entire paragraph.

True > Add new paragraph to DOD-STD-2167A.

5.4.2.6 The contractor shall produce updated versions of the software support and operational documentation MIL-STC-1521B:

50.1 Replace references to the Software Detailed Design Document (SDDD) with Software Unit Specifications (USs) and the Database Specification (DS) Delete references to Data Base Design Document(s) (DBDD(s)), and Interface Design Document(s)(IDD(s)).

Replace references to the Software Top-Level Design Document (SDDD) with Software Unit Specifications (USs) and the Database Specification (DS). Replace reference to the Computer System Operator's Manual (CSOM), Software User's Manual (SUM), Computer System Diagnostic Manual (CSDM). Software Programmer's Manual, and Firmware Support Manual (FSM) with support and operational documentation.

Replace reference to STD with PT.

Replace reference to CSOM, SUM, and CSDM with other support and operational documentation.

- 50.2.2.a Replace reference to Software Detailed Design and Database Design with Software Unit Specifications (USs) and the Database Specification (DS).

 Delete reference to Interface Design Document(s).
- 50.2.2.h Delete "(CSOM, SUM, CSDM)."
- 50.3.2.a Replace references to Lower-Level Computer Software Components (LLCSCs) and TLCSCs with subsystems..
- 50.3.2.c Replace reference to TLCSCs, LLCSCs with subsystems.
- 50.5.1 Delete reference to Software Requirements Specification(s)
- 50.6.1 Delete reference to Software Requirements Specification(s)
- 50.7.1 Delete reference to Software Requirements Specification and Interface Requirements Specification(s).
- 50.13.1 Delete entire paragraph.
- 50.13.2 Delete entire paragraph.
- 50.13.3 Replace reference to Software Requirements and Interface Requirements Specifications with System/Subsystem Specifications
- 50.13.4 Delete entire paragraph.
- 50.13.7 Replace initial paragraph with "Review Test Plan (PT) to ensure it thoroughly identifies necessary parameters and prerequisites to enable execution of each planned software test and monitoring of test results. As a minimum, test plans shall identify the following for each test:"

2.2.6 Test Readiness Review (TRR) shall be conducted.

- False \Rightarrow 5.6.1 Delete entire paragraph.
 5.6.4 Delete reference to Test Readiness Review(s).
 - True ⇒ Add new paragraph to DOD-STD-2167A:
 - 5.5.2.4 The contractor shall produce updated versions of the software support and operational documentation MIL-STD-1521B:
 - 60.1 Replace reference to the Computer System
 Operator's Manual (CSOM), Software User's Manual
 (SUM), and Computer System Diagnostic Manual
 (CSDM) with support and operational documentation
 - 60.2.1 Replace reference to Software Requirements
 Specification or Interface Requirements
 Specification(s) with System/Subsystem
 Specification.
 - 60.2.2 Replace reference to Software Top-Level Design Document, Software Detailed Design Document, Data Base Design Document(s) or interface Design Document(s) with Software Unit Specifications (USs) and the Database Specification (DS).

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60.2.3	Replace reference to			Plans	with	Tes
	Plans. Delete references to	software	test	descri	ptions	·.
60.2.10	Delete "(e.g., CSOM, S					

2.2.7 Functional Configuration Audit (FCA) shall be supported.

- False \Rightarrow 5.7.1 Delete reference to Functional Configuration Audit.

 5.7.2.3 Delete reference to Functional Configuration Audit.

 5.7.5.2 Delete reference to Functional Configuration Audit.

 5.8.1 Delete reference to Functional Configuration Audit.
 - True ⇒ MIL-STD-1521B:

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- 70.1 Replace reference to Software Requirements and Interface Requirements Specifications with System/Subsystem Specification.
 Replace reference to Software Test Reports with Test Analysis Report.
 Replace reference to the Computer System Operator's Manual (CSOM), Software User's Manual (SUM), and Computer System Diagnostic Manual (CSDM) with support and operational documentation
- 70.3.1 Delete "(this information shall be provided in addition to the general requirements of Section 4)"
- 70.4.3 Delete "as set forth in the specification Section 3 and meet the quality assurance provisions/qualification requirements contained in the specification Section 4."
- 70.4.12.c Replace reference to Software Test Reports with Test Analysis Report.

2.2.8 Physical Configuration Audit (PCA) shall be supported.

- False \Rightarrow 5.71 Delete reference to Physical Configuration Audit 5.7.2.3 Delete reference to Physical Configuration Audit. 5.7.5.2 Delete reference to Physical Configuration Audit. Delete reference to Physical Configuration Audit.
 - True > MIL-STD-1521B:
 - 80.1.4 Delete "(i.e., Computer System Operator's Manual (CSOM), Software User's Manual (SUM), Computer System Diagnostic Manual (CSDM), Software Programmer's Manual (SPM), Firmware Support Manual (FSM))."
 - 80.3.1 Delete "(this information shall be provided in accordance with the general requirements of Section 4 and the contractual requirements)."
 - 80.3.2.i Replace reference to Software Programmer's Manuals (SPMs), Software User's Manuals (SUMs), Computer System Operator's Manual (CSOM), Computer System Diagnostic Manual (CSDM), and Firmware Support Manual (FSM) with support and operational documentation.

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- 80.3.3.a Replace reference to Software Requirements
 Specification and Interface Requirements
 Specification(s) with System/Subsystem
 Specification.
- 80.4.10.d Replace with "Compare subsystem design descriptions for consistency."
- 80.4.10.e Replace reference to lower-level design description with software unit design descriptions.
- 80.4.10.f Replace reference to Software User's Manual(s), Software Programmer's Manual, Computer System Operator's Manual, Firmware Support Manual, and Computer System Diagnostic Manual with support and operational documentation.
- 80.4.10.g Delete entire paragraph.
- 2.2.9 Formal Qualification Review (FQR) shall be supported.

__ False ⇒ No action required.

True \Rightarrow MIL-STD-1521B:

- 90.1 Replace reference to Software Requirements and Interface Requirements Specifications with System/Subsystem Specification.
- 90.2.3.1 Replace reference to System/Segment, Software Requirements, and Interface Requirements
 Specifications with Functional Description and System/Subsystem Specification
- App I, Fig 4, Page 1a or 20
- (10) Replace with "Review support and operational documentation."
- (11)(a) Replace with "Subsystem design descriptions or alternative design portrayals"
- (11)(b) Replace with "Subsystem interface requirements."
- 2.3 The performance of Formal Qualification Testing shall be required of the contractor as a part of this project. (Note: A false answer will result in the tailoring out of all activities related to Formal Qualification Testing, including the preparation of testing documents such as the Test Plan (PT) and the Test Analysis Report (RT).)
 - False ⇒ 4.3 Delete entire paragraph. 43.1 Delete entire paragraph 4.3.2 Delete entire paragraph. 4.3.3 Delete entire paragraph. 4.3.4 Delete entire paragraph. 5.1.3 Delete entire paragraph. 5.2.3 Delete entire paragraph. 5.3.3 Delete entire paragraph. 5.3.4.c Delete entire statement. 5.3.5.2 Delete entire paragraph. 5.4.3 Delete entire paragraph. Delete entire statement. 5.4.4.f Delete entire paragraph. 5.4.5.3 5.5.3 Delete entire paragraph.

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Delete entire paragraph.
         5.6.3.1 Delete entire paragraph. 5.6.3.2 Delete entire paragraph.
         5.6.4.b.
                   Delete entire statement.
         5.7.2.1
                   Delete entire paragraph.
                  Delete entire paragraph.
         5.7.2.2
                   Delete entire paragraph.
         5.7.3
         5.7.3.1
                   Delete entire paragraph.
         5.7.3.2
                   Delete entire paragraph.
                   Delete sentire paragraph.
         5.7.3.3
                   Delete entire statement.
         5.7.4.a
         5 8.3
                   Delete entire paragraph.
         5.8.3.1
                   Delete entire paragraph.
         5 8.3.2
                   Delete entire paragraph.
                   Delete entire paragraph.
         5 8.3.3
         Fig 6
                   Delete row corresponding to Software Test Plan (STP).
         Fig 7
                   Delete row corresponding to Software Test Descriptions
                   (STDs) - Test cases.
         Fig 9
                   Delete row corresponding to Software Test Descriptions
                   (STDs) - Formal test procedures.
         Fig 10
                   Delete reference to STDs.
                   Delete row corresponding to Software Test Report (STR).
      SDP 10.2.7
                   Delete entire paragraph and all subparagraphs
True \Rightarrow 43
                   Replace the last sentence with "The contractor may
                   conduct, as part of the FQT activity, testing of the AIS
                   integrated with other AISs or hardware components."
         4.3 1
                   Replace references to the Software Test Plan (STP) with the
                   Test Plan (PT).
                   Replace reference to configuration items with AISs.
          5.13
                   Delete reference to Software Requirements Specification
                   (SRS).
                    Delete last sentence.
          523
                    Delete reference to Software Requirements Specification
                    Replace references to Software Test Description (STD) with
         5 6.3.2
                    Test Plan (PT).
          5.7.3.1
                    Replace reference to Software Test Description (STD) with
                    Test Plan (PT).
2.3.1 A software test environment shall be established.
       False \Rightarrow 4.3.2
                           Delete entire paragraph
       True > No action required.
2.3.2 The Formal Qualification Test (FQT) procedures shall be "dry
       run."
       False \Rightarrow 5.6.3.2
                           Delete entire paragraph
       True > No action required.
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- 2.3.3 Independent testers shall be used.
- False => 4.3.3 Delete entire paragraph.
- ___ True > No action required.
- 2.4 The performance of Configuration Management shall be required of the contractor as a part of this project.
- False $\Rightarrow 4.5$ Delete entire paragraph. Delete entire paragraph. 4.5.1 Delete entire paragraph. 4.5.2 4.5.3 Delete entire paragraph. 4 5.4 Delete entire paragraph. 4.5.5 Delete entire paragraph. Delete entire paragraph. 5.1.5 5 2.5 Delete entire paragraph. 5.3.5 Delete entire paragraph. 5.3.5.1 Delete entire paragraph. Delete entire paragraph. 5.3.5.2 Delete entire paragraph. 5.3.5.3 5.4.5 Delete entire paragraph. 5.4.5.1 Delete entire paragraph. 5 4.5.2 Delete entire paragraph. Delete entire paragraph. 5.4.5.3 Delete entire paragraph. 5.5.5 5.5.5.1 Delete entire paragraph. 5.5.5.2 Delete entire paragraph. 5.6.5 Delete entire paragraph. Delete entire paragraph. 5.7.5 5.7.5.1 Delete entire paragraph. 5.7.5.2 Delete entire paragraph. 5.8.4 Delete entire paragraph. Delete entire paragraph. 5 8.5 SDP 10.2.9 Delete entire paragraph and all subparagraphs

True = Continue.

- 2.4.1 Configuration identification shall be performed.
- ___ False \(\infty 4.5.1 \) Delete entire paragraph.
- ___ True > Continue.
 - 2.4.1.1 Baseline documentation shall be identified.
 - ___ False \(\Rightarrow \ 4.5.1.a \) Delete entire statement.

 SDP 10.2.9.2.1 Delete entire paragraph.
 - ___ True > No action required.

		2.4.1.2 Documentation/media under configuration management shall be identified.
		False \(\infty 4.5.1.b \) Delete entire statement.
,		True > No action required.
		2.4.1.3 The AIS and each Subsystem and Software Unit shall be identified.
		False \Rightarrow 4.5.1.c Delete entire statement. SDP 10.2.9.2.2 Delete entire paragraph.
		True \Rightarrow No action required.
		2.4.1.4 Version/release/change status shall be identified.
		False \Rightarrow 4.5.1.d Delete entire statement.
		True > No action required.
		2.4.1.5 Code to documentation relationship shall be identified.
		False \Rightarrow 4.5.1.e Delete entire statement
		True > No action required.
		2.4.1.6 Deliverable medium contents shall be identified.
		False \(\Delta \) 4.5.1.f Delete entire statement.
		True ⇒ No action required.
	2.4.2	Configuration control shall be performed.
		False \Rightarrow 4.5.2 Delete entire paragraph. SDP 10.2.9.3 Delete entire paragraph and all subparagraphs.
	-	True \Rightarrow Continue.
		2.4.2.1 Development configuration shall be established.
		False \(\Delta \) 4.5.2.a Delete entire statement.
		True > No action required.
		2.4.2.2 Current copies of deliverables shall be maintained.
		False \Rightarrow 4.5.2.b Delete entire statement
		True > No action required.

(36° (86° (88)	2.4.2.3 Access to documents/code under configuration management shall be provided.
्रेड्डिड्डिड्डिड्डिड्ड े	False > 4.5.2.c Delete entire statement.
	True > No action required.
	2.4.2.4 Changes to master copy of deliverables shall be controlled.
	False \(\Delta \) 4.5.2.d Delete entire statement.
	True > No action required.
	2.4.2.5 Developmental configuration shall be disestablished.
	False \(\Delta \) 5.7.5.2 Delete last sentence.
-	True > No action required.
2.4.3	Configuration status accounting shall be performed.
***********	False \Rightarrow 4.5.3 Delete entire paragraph. SDP 10.2.9.4 Delete entire paragraph.
-	True ⇒ Continue.
	2.4.3.1 Traceability of changes shall be provided.
	False > 4.5.3.a Delete entire statement.
	True > No action required.
	2.4.3.2 Configuration status shall be communicated.
	False \Rightarrow 4.5.3.b Delete entire statement.
	True > No action required.
	2.4.3.3 Consistency between documents and code shall be ensured.
	False \Rightarrow 4.5.3.c Delete entire statement.
	True > No action required.
2.4.4	Storage, handling, and delivery procedures shall be implemented.
	False \Rightarrow 4.5.4 Delete entire paragraph.
	True > No action required.
	True - no action required.

2.4.5 Engineering Change Proposals (ECPs) [DI-E-3128] per DOD-STD-480 or MIL-STD-481 and Software Change Notices (SCNs) [DI-E-3134] per MIL-STD-490 shall be prepared for baselined documents.
False ⇒ 4.5.5 Delete entire paragraph. 5.8.4 Delete entire paragraph.
True > No action required.
3. Major Activities
Performance of the following major activities shall be required of the contractor as a part of this project. (Note: If you answer false, all items related to the specified major activity will be tailored out including items that are prerequisites for future activities. This guide does not protect you from the inconsistencies that may arise. Therefore, extreme caution should be used when tailoring out major activities. If you answer true, you will be given an opportunity to selectively tailor the major activities with respect to individual products in Section 5.)
3.1 The performance of System Requirements Analysis/Design shall be required of the contractor as a part of this project.
False \Rightarrow 4.1.1.a Delete entire statement. 5.1 Delete entire section.
True ⇒ No action required.
3.2 The performance of Software Requirements Analysis shall be required of the contractor as a part of this project.
False \Rightarrow 4.11.b Delete entire statement. 5 2 Delete entire section.
True > No action required.
3.3 The performance of Preliminary Design shall be required of the contractor as a part of this project.
False \Rightarrow 41.1.c Delete entire statement. 5.3 Delete entire section.
True > No action required.
3.4 The performance of Detailed Design shall be required of the contractor as a part of this project.
False \Rightarrow 41.1 d Delete entire statement. 5.4 Delete entire section.
True > No action required.

- The performance of Coding and Software Unit Testing shall be required of the contractor as a part of this project. 3.5 False \Rightarrow 4.1.1.e Delete entire statement. 5.5 Delete entire section. True ⇒ Continue. 3.5.1 Software unit testing shall be performed. False $\Rightarrow 5.4.2.5$ Delete entire paragraph. Delete entire statement. 5.4.4.d 5.5 2.1 Delete entire paragraph. 5.5.2.2 Delete references to testing and recording results 5.5.2.3 Delete entire paragraph. Delete entire statement. 5.5.4.c Fig 7 Delete row corresponding to software unit test requirements and test cases. Delete rows corresponding to software unit test Fig 8 procedures and software unit test results. True > No action required. The performance of Subsystem Integration and Testing shall be 3.6 required of the contractor as a part of this project. False \Rightarrow 4.1.1.f Delete entire statement. 5.6 Delete entire section. True > Continue. 3.6.1 Software subsystem testing shall be performed. False \Rightarrow 5.3 2.4 Delete entire paragraph. 5.3.4.d Delete entire statement. 5.4.2.4 Delete entire paragraph. 5.4.4.c Delete entire statement.
 - Delete entire paragraph. 5.5.2.4 5.5.4.b Delete entire statement. 5.6.2.1 Delete entire paragraph. 5 6 2.2 Delete entire paragraph. Delete entire paragraph. 5.6.2.3 5.6.4.a Delete entire statement. 5.6.5 Delete "tested and." Fig 6 Delete row corresponding to subsystem test requirements. Fig 7 Delete row corresponding to subsystem test cases. Fig 8 Delete row corresponding to subsystem test procedures. Fig 9 Delete row corresponding to subsystem test results

True ⇒ No action required.

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3.7	contractor as a part of this project.
	False \Rightarrow 4.1.1.g Delete entire statement. 5.7 Delete entire section.
	True > No action required.
3.8	The performance of System Integration and Testing shall be required of the contractor as a part of this project.
	False \Rightarrow 4.1.1.h Delete entire statement. 5.8 Delete entire section
	True ⇒ Continue.
	3.8.1 System-level test planning shall be supported.
	False \(\infty 5.8.3.1 \) Delete entire paragraph.
	True > No action required.
	3.8.2 System-level testing shall be supported.
	False \(\Delta \) 5.8.3.2 Delete entire paragraph
	True > No action required.
	3.8.3 Post-test analysis and reporting shall be supported.
	False \(\infty 5.8.3.3 \) Delete entire paragraph.
	True > No action required
	3.8.4 Revisions shall be made and retesting shall be performed.
	False \(\Delta \) 5.8.2 Delete entire paragraph.
	True >> No action required.
4. A	dditional Activities
Perfo	ormance of the following additional activities shall be required of contractor as a part of this project.
4.1	The AIS shall be organized into subsystems and software units.
	False \(\Display 4.2.5 \) Delete entire paragraph.

True \Rightarrow 4.2.5 Delete reference to Figure 3

4.2 Training and support shall be provided.

False > 4.6.3 Delete second sentence.

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True > No action required.

5. Products

The following software products shall be prepared/updated/evaluated/configuration managed/etc. as a part of this project. (Note: If you answer false, all activities related to the specified software product will be tailored out. If you answer true, you will be given an opportunity to selectively tailor the activities for each of the software products.) Remember to include each deliverable on the Contract Data Requirements List (CDRL) using the current Data Item Description (DID) number as specified in Section 6 of the relevant standard.

- 5.1 The Functional Description (FD) [DI-IPSC-80689] shall be prepared/updated/ evaluated/configuration managed/etc. as a part of this project.
 - False \Rightarrow 4.2.6 Delete reference to system specification.
 - 4.3.4 Delete reference to Software Requirements
 Specification(s) (SRSs).

Delete reference to Interface Requirements Specification (IRS).

5.1.2.1 Delete entire paragraph.

Fig 4 Delete reference to System Specification

Fig 5 Deleter reference to System Specification.

Fig 6 Delete reference to SSDD.

- Fig 9 Delete reference to SRSs as the indicated documents for traceability evaluation of Test Plan (PT).
- True > Fig 4 Replace reference to System Specification with Functional Description.
 - Fig 5 Replace reference to System Specification with Functional Description.

Fig 6 Replace reference to SSDD with FD.

Fig 7 Replace SS with FD as the indicated document for traceability evaluation of Test Plan (PT).

Fig 9 Replace SRSs with FD as the indicated document for traceability evaluation of Test Plan (PT)

- 5.1.1 The Functional Description (FD) [DI-IPSC-80689] shall be analyzed as a part of this contract.
 - False - 4.2.6 Delete reference to system specification.
 - 4.3.4 Delete reference to Software Requirements
 Specification(s) (SRSs).

 Delete reference to Interface Requirements
 Specification (IRS).
 - 5.1.2.1 Delete entire paragraph.

- __ True > 4.2.6 Replace reference to system specification with second Eurocional Description.
 - Functional Description.

 4.3.4 Replace reference to Software Requirements Specification(s) (SRSs) with Functional Description (FD).

 Delete reference to Interface Requirements

Specification (IRS).

5.1.2.1 Replace reference to system specification with Functional Description.

5.2 The Software Development Plan (SDP) [DI-MCCR-80030A] shall be prepared/updated/evaluated/configuration managed/etc. as a part of this project.

Note: The Software Development Plan must be tailored to be consistent with decisions made for DOD-STD-2167A tailoring. For example, if Formal Qualification Testing, Software Product Evaluations, or Configuration Management is tailored out of DOD-STD-2167A, related sections should be tailored out of the Software Development Plan. Tailoring instructions for the Software Development Plan are distributed throughout this guide. If the Software Development Plan is not a product of this project, ignore the SDP tailoring instructions.

False \Rightarrow 4.1.3 Delete entire paragraph. 4 2.5 Delete reference to Software Development Plan (SDP) 4.3.3 Delete reference to Software Development Plan (SDP). 4.4.1 Delete reference to Software Development Plan (SDP). 5.1.4.a Delete entire statement. 5.1.5.a Delete entire statement. 5.4.4.e Delete reference to Software Development Plan (SDP). Fig 4 Delete row corresponding to Software Development Plan: Fig 6 Delete reference to Software Development Plan (SDP). App D, 10.2.5 Delete references to Software Development Plan (SDP).

True > Continue.

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- 5.2.1 The Software Development Plan (SDP) [DI-MCCR-80030A] shall be prepared as a part of this contract.
- False \Rightarrow 4.1.3 Delete entire paragraph. 4.2.5 Delete reference to Software Development Plan (SDP).433 Delete reference to Software Development Plan (SDP).4.4.1 Delete reference to Software Development Plan (SDP). 5.4.4.e Delete reference to Software Development Plan (SDP). Fig 6 Delete reference to Software Development Plan App D, 10.2.5 Delete references to Software Development Plan (SDP).

True ⇒ SDP

N. 18 1. 18 1. 18 1. 18 1.

10.2.5.1.2 Add Functional Description to the document list in final sentence.

5.2.2 The Software Development Plan (SDP) [DI-MCCR-80030A] shall be evaluated as a part of this contract. (Note: Skip this item if you checked false for Statement 2.1.)

False \Rightarrow 5.1.4.a Delete entire statement.

Fig 4 Delete row corresponding to Software Development

True > No action required.

5.2.3 The Software Development Plan (SDP) [DI-MCCR-80030A] shall be configuration managed as a part of this contract. (Note: Skip this item if you checked false for Statement 2.4.)

False > 5.1.5.a Delete entire statement.

True > No action required.

- 5.3 The System Specification and Subsystem Specifications (SS) [DI-IPSC-80690] shall be prepared/updated/evaluated/configuration managed/etc. as a part of this project.
- False \Rightarrow 4.2.6 Delete reference to Software Requirements Specifications

 Delete reference to Interface Requirements Specification.
 - 5.1.2.2 Delete entire paragraph.
 - ~5.1.2.3 Delete entire paragraph.
 - 5:1.2.4 Delete entire paragraph.
 - 5.1.4.b Delete entire statement.
 - 5.1.4.c Delete entire statement.
 - 5.1.4.d Delete entire statement.
 - 5.1.5.b Delete entire statement
 - 5.1.5.c Delete entire statement.
 - 5.1.5.d Delete entire statement.
 - 5.2.1 Delete second sentence.
 - 5.2.2.1 Delete entire paragraph.
 - 5.2.2.2 Delete entire paragraph.
 - 5.2.4 Delete entire paragraph.
 - 5.2.5 Delete entire paragraph.
 - Fig 4 Delete row corresponding to System/Segment Design Document (SSDD).

Delete row corresponding to Preliminary Software Requirements Specification(s).

Delete row corresponding to Preliminary Interface Requirements Specification (IRS).

Fig 5 Delete row corresponding to Software Requirements Specification(s).

Delete row corresponding to Interface Requirements

Specification (IRS).
Fig 6 Delete references to SRSs.
Delete references to IRS.

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ના ક	v. , v.	Fig	7	Delete Delete	references to SRSs.
		Fig	9		references to IRS.
	True	,⇒ [′] 5.1	.2.2	Delete	e entire paragraph.
, ;,	·		4		row corresponding to System/Segment Design
					nent (SSDD).'
				Delete Requi	e row corresponding to Preliminary Interface rements. Specification (IRS).
*\$5 54 5 K	,	Fig	5	Delete	row corresponding to Interface Requirements
				Specij	fication (IRS).
		Fig	6		ce references to SRSs with SS.
		,	~		references to IRS
		Fig	/		ce references to SRSs with SS.
		Fig	0		references to IRS references to IRS.
		1 18	,	Detete	e references to INS.
	5.3.1				ecification and Subsystem Specifications (SS) shall be prepared as a part of this contract.
		Enles	_	5122	Delete entire paragraph
		raise	_	5.1.2.5	Delete entire paragraph.
				5.2.2.1	Delete entire paragraph.
					Delete entire paragraph
					La Contraction of the contractio
		True	⇒	5.1 2.3	Replace with "The contractor shall prepare a
					preliminary System/Subsystem Specification (SS)."
				5.1 2.4	
				5.2.2 1	•
					System/Subsystem Specification (SS)."
				5.2.2.2	Delete entire paragraph
	5.3.2	[DI-II	PSC	-80690]	pecification and Subsystem Specifications (SS) shall be evaluated as a part of this contract. tem if you checked false for Statement 2.1.)
		5		40.6	
		False	⇒	4.2.0	Delete reference to Software Requirements
					Specifications.
					Deletc reference to Interface Requirements Specification.
				5.1.4.b	Delete entire statement.
				5 1.4 c	
				5.1.4 d	Delete entire statement.
				5.2.4	Delete entire paragraph.
				Fig 4	Delete row corresponding to Preliminary Software
				ŭ	Requirements Specification(s).
				Fig 5	Delete row corresponding to Software Requirements
					Specification(s).
		True	_	4 2.6	Renlace reference to Saturara Paguinamente
		1.46	7	7 2.0	Replace reference to Software Requirements Specifications with System/Subsystem Specification
					Delete reference to Interface Requirements
					Specification.
				5.1.4 b	Delete entire statement.

Replace with "The preliminary System! Subsystem 5.1.4.c Specification (SS). for 'the AIS."

5.1.4.d Delete entire statement:

Replace with "The System/Subsystem Specification (SS) for the AIS." 5.2.4.a

5.2.4.b Delete entire statement.

- Fig 4 Replace reference to Software Requirements Specification (SRS) with System/Subsystem Specification (SS). Delete reference to "Adequate test coverage of requirements" Evaluation Criteria. Deleté : Serences to Interface Requirements Specification (IRS). Delete "Adequacy of quality factor requirements" Criteria.
- Fig 5 Replace reference to Software Requirements Specification (SRS) with System/Subsystem Specification (SS). Delete reference to "Adequate test coverage of requirements" Evaluation Criteria. Delete references to Interface Requirements Specification (IRS). Delete "Adequacy of quality factor requirements" criteria.
- 5.3.3 The System Specification and Subsystem Specifications (SS) [DI-IPSC-80690] shall be configuration managed as a part of this contract. (Note: Skip this item if you checked false for Statement 2.4.)
 - False $\Rightarrow 5.1.5.b$ Delete entire statement.
 - 5.1.5.c Delete entire statement.
 - 5.1.5.d Delete entire statement.
 - 5.2.5 Delete entire paragraph
 - True $\Rightarrow 5.1.5.b$ Delete entire statement.
 - 5.1.5.c Replace with "The preliminary System! Subsystem (SS) for the AIS."
 - 5.1.5.d Delete entire statement.
 - 5.2.5 Replace reference to Software Requirements Specification(SRS) with System/Subsystem Specification (SS). Delete reference to Interface Requirements Specification (IRS).
- Specification(s) (USs) [DI-IPSC-80691] shall 5.4 Software Unit prepared/updated/ evaluated/configuration managed/etc. as a part of this project.
 - False > 5.3.2 1 Delete entire paragraph.
 - Delete entire statement. 5.3.4.a
 - 5.3.5.1 Delete entire paragraph.
 - 5.4.2.1 Delete entire paragraph.
 - 5.4.4.a Delete entire statement.

is repotest			
	`5.4.5.1· 5.5.5.1	Delete Delete	entire päragraph. reference to Software Design Documents (SDDs).
ัดอย่างกับ.	5.6.5	Delete	reference to Software Design Documents (SDDs).
٦.	5.7.2.1 Fig 6	Delëtë	reference to Software Design Document(s) (SDDs). row corresponding to Software Design Document(s) - Preliminary Design.
	. Fig 7	Delete	reference to SDDs. row corresponding to Software Design Document(s)
٠,	****	(SDDs)	- Detailed Design. references to SDDs.
	Fig 8	Delete	references to SDDs.
	Fig 9		references to SDDs.
	Fig 10	Delete	references to SDDs.
True	⇒ Fig 6		e reference to SDDs with USs
	Fig 7 Fig 8		e references to SDDs with USs e references to SDDs with USs.
	Fig 9		e references to SDDs with USs.
	Fig 10		e references to SDDs with USs.
5.4.1	Software prepared		pecification(s) (USs) [DI-IPSC-80691] shall be art of this contract.
	False ⇒		Delete entire paragraph Delete entire paragraph.
	True >		Replace with "The contractor shall develop preliminary Software Unit Specifications (USs)
		16.47.	documenting the Summary of Requirements and Environment."
		5.4.2.1	Replace with "The contractor shall develop Software Unit Specifications (USs) documenting the Design Details"
30 2 . DE 5 . 4 . 2			pecification(s) (USs) [DI-IPSC-80691] shall be t of this contract.
The state of the s	False ⇒	5.7.2.1	Delete reference to Software Design Document(s) (SDDs).
	True ⇒	5.7.2.1	Replace reference to Software Design Document(s) (SDDs) with Software Unit Specifications (USs)
76 Hegs. 4.3	Software evaluated checked	Unit S as a pa false for S	pecification(s) (USs) [DI-IPSC-80691] shall be rt of this contract. (Note: Skip this item if you tatement 2.1.)
	False ⇒	5.3.4.a	Delete entire statement.
		5.4.4.a	Delete entire statement
		Fig 6	Delete row corresponding to Software Design Document(s) (SDDs) - Preliminary Design.
		Fig 7	Delete row corresponding to Software Design Document(s) (SDDs) - Detailed Design.

		Tru	e ⇒	5.3.4.a	Replace with "The preliminary Software Unit
				5.4.4.a	Specifications (USs) for the AIS." Replace with "The updated Software Unit
				F' . 6	Specifications (USS) for the AIS."
				Fig 6	Replace "Software Design" Document (SDD) - Preliminary Design" with "preliminary Software
					Unit Specifications (USs) - Summary of Requirements and Environment."
				Fig 7	Replace "Software Design Document (SDD) - Detailed Design" with "Software Unit Specifications (USs) - Design Details."
	5.4.4	con	figura	ition man	Epecification(s) (USs) [DI-IPSC-80691] shall be aged as a part of this contract. (Note: Skip ecked false for Statement 2.4.)
		Fal	aa -	5251	Delete autire paragraph
		rais	se >	5.3.5.1 5.4.5.1	Delete entire paragraph. Delete entire paragraph
				5.4.5.1 5.5.5.1	Delete reference to Software Design Documents
				5.5.5.2	(SDDs).
				5.6.5	Delete reference to Software Design Documents (SDDs).
		30		5251	Design of the Color Day of
		ı ru	ie ⇒	5.3.5.1	Replace reference to Software Design Document (SDD) with preliminary Software Unit Specifications
					(USs).
				5.4.5.1	Replace reference to Software Design Document
					(SDD) with Software Unit Specifications (USs).
			-	_5.5.5.1	Replace reference to Software Design Documents
					(SDDs) with Software Unit Specifications (USs).
				5.6.5	Replace reference to Software Design Documents (SDDs) with Software Unit Specifications (USs).
					(c== c) coje zpecojecanono (cos),
5.5			ataba		cification (DS) [DI-IPSC-80692] shall be
			/upda proje		iluated/configuration managed/etc. as a part
	False	⇒	5.3.2.	2 Delet	e entire paragraph.
			5.3.4.		e entire statement.
			5.3.5.		e entire paragraph.
			5.4.2.		e entire paragraph.
			5.4.4.		e entire statement.
			5.4.5. 5.7.2.		e entire paragraph.
			5.7.2. Fig 6		e entire paragraph. e row corresponding to Preliminary Interface Design
			1.80	Deter	mana (IDD)
				Delet	reference to IDD.
			Fig 7		e row corresponding to Interface Design Document
				Delet	e references to IDD.
			Fig 8	Delet	e references to IDD.
			Fig 9		e reference to IDD.
			Fig 1	U Delet	e reference to IDD.

- True Fig 6 Replace reference to IDD with DS.

 Fig 7 Replace references to IDD with DS.

 Fig 8 Replace references to IDD with DS.

 Fig 9 Replace reference to IDD with DS.

 Fig 10 Replace references to IDD with DS.
- 5.5.1 The Database Specification (DS) [DI-IPSC-80692] shall be prepared as a part of this contract.
 - False \Rightarrow 5.3.2.2 Delete entire paragraph.
 5.4.2.2 Delete entire paragraph.

· - (:);

. Oesign

- True \Rightarrow 53.2.2 Replace with "The contractor shall develop a preliminary Database Specification (DS)."

 5.4.2.2 Replace with "The contractor shall develop the Database Specification (DS)."
- 5.5.2 The Database Specification (DS) [DI-IPSC-80692] shall be updated as a part of this contract.
 - False \Rightarrow 5.72.2 Delete entire paragraph.
 - ___ True \(\Rightarrow 5.7.2.2 \) Replace references to Interface Design Document (IDD) with Database Specification (DS)
- 5.5.3 The Database Specification (DS) [DI-IPSC-80692] shall be evaluated as a part of this contract. (Note: Skip this item if you checked false for Statement 2.1.)
 - False \$ 5.3.4.b Delete entire statement.

 5.4.4.b Delete entire statement.

 Fig 6 Delete row corresponding to Preliminary Interface

 Design Document (IDD).
 - Fig 7 Delete row corresponding to Interface Design Document (IDD).
 - True \Rightarrow 5.3.4.b Replace reference to Interface Design Document (IDD) with Database Specification (DS)
 - 5.4.4.b Replace reference to Interface Design Document (IDD) with Database Specification (DS).
 - Fig 6 Replace reference to Interface Design Document (IDD) with Database Specification (DS)
 - Fig 7 Replace reference to Interface Design Document (IDD) with Database Specification (DS).
 - 5.5.4 The Database Specification (DS) [DI-IPSC-80692] shall be configuration managed as a part of this contract. (Note: Skip this item if you checked false for Statement 2.4)
 - False \Rightarrow 5.3.5.3 Delete entire paragraph.
 5.4.5.2 Delete entire paragraph.

True $\Rightarrow 5.3.5.3$ Replace reference to Interface Design Document (IDD) with Database Specification (DS).

5:4:5.2 Replace reference to Interface Design Document (IDD) with Database Specification (DS).

5.6 Software Development Files (SDFs) shall be prepared/updated/evaluated/configuration managed/etc. as a part of this project.

```
False \Rightarrow 4.2.4
                    Delete reference to software development files.
          429
                    Delete entire paragraph.
                    Delete entire paragraph.
          5.3.2.3
                    Delete entire paragraph.
          5.3.2.4
          5.3.4.d
                    Delete entire statement.
          5.4.2.3
                    Delete entire paragraph.
                    Delete entire paragraph.
          5 4 2.4
                    Delete entire paragraph.
          5 4.2.5
          5.4.4.c
                    Delete entire statement.
          5 4.4.d
                    Delete entire statement.
          5.4.4.e
                    Delete entire statement.
                    Delete entire paragraph.
Delete second sentence.
          5.5.2.1
          5 5.2.2
                    Delete reference to SDFs.
          5.5.2.3
          5 5.2.4
                    Delete entire paragraph.
          5.5 4.b
                    Delete entire statement.
                    Delete entire statement.
          5 5.4 c
          5 5.4.d
                    Delete entire statement.
          5.6.2.2
                    Delete entire paragraph.
          5.6.2.3
                    Delete reference to software development files.
                    Delete "shall record the results of this activity in the
          5.6.3.2
                    corresponding CSCI software development files (SDFs)
                     and."
          5 6 4.a
                    Delete entire statement.
          5 6.4.d
                    Delete entire statement.
          5.7.2 1
                     Delete reference to software development files.
          Fig 6
                     Delete row corresponding to subsystem test requirements
          Fig 7
                     Delete row corresponding to software unit test
                     requirements and test cases.
                     Delete row corresponding to subsystem test cases.
                     Delete row corresponding to contents of software unit and
                     subsystem SDFs.
          Fig 8
                     Delete rows corresponding to software unit test procedures
                     and software unit test results.
                     Delete row corresponding to subsystem test procedures
                     Delete row corresponding to contents of software unit and
                     subsystem SDFs.
           Fig 9
                     Delete row corresponding to subsystem test results.
                     Delete row corresponding to contents of updated SDFs.
```

True > Continue.

SDP 10.2.6.2.2

Delete entire paragraph.

Les Brokens Color 5.6.1 Software indevelopment spfiles shall be established for software weamen Cunitive or egroups of Erelated software units. ere is a standard Specification (DS) False \Rightarrow 4.2.9 Delete references to software units. 7 Rouse 5:4.2.5 st Delete Centire paragraphin Delete entire paragraph. 5.5.2.2 Delete second sentence. 5.5.2.3 Delete reference to SDFs. 5.6.2.3 Delete reference to software units. Delete reference to software units. 5.7.2.1 True > No action required. for 5.6.2 Software development files shall be established subsystems or groups of related subsystems. False \Rightarrow 4.2.9 Delete references to subsystems 5.3.2.4 Delete entire paragraph. 5.4.2.4 Delete entire paragraph. 5.5.2.4 Delete entire paragraph. 5.6.2.2 Delete entire paragraph. 5.6.2.3 Delete reference to subsystems Delete reference to subsystems 5.7.2.1 True > No action required. 5.6.3 A software development file shall be established for the AIS. False $\Rightarrow 4.2.9$ Delete references to the AIS. --5.6.2.3 Delete-reference to the AIS. 5.6.3.2 Delete "shall record the results of this activity in the corresponding CSCI software development files (SDFs) and." 5.7.2.1 Delete reference to the AIS True > No action required. 5.6.4 Software development files shall include design constraints/ considerations. False \Rightarrow 4.2.9.a Delete entire statement. 5.3.2.3 Delete entire paragraph 5.4.2.3 Delete entire paragraph. ___ True :>1.5.3.2.3 Replace reference to Section 8 of the Software Design Document (SDD) with the Software

Development Files (SDFs).

Development Files (SDFs)

Replace reference to Section 8 of the Software Design Document (SDD) with the Software

5.4.2 3

- 5.6.5 Software development files shall include design documents and data.
 - Falsc \(\infty 4.2.9.b \) Delete entire statement.
- ___ · True ⇒ No action required.
- 5.6.6 Software development files shall include schedule/status information
- ___ False > 4.2.9.c Delete entire statement.
 - 5.4.2.4 Delete reference to schedules.
 - 5.4.2.5 Delete reference to schedules.
- ___ True > No action required.
- 5.6.7 Software development files shall include test requirements/ responsibilities (Note: Skip this item if you checked false for Statements 3.5.1 and 3.6.1.)
 - __ False \Rightarrow 4.2.9.d Delete entire statement.
 - 5.3.2.4 Delete entire paragraph.
 - 5.3.4.d Delete entire statement.
 - 5.4.2.4 Delete reference to test responsibilities
 - 5 4.2.5 Delete reference to test requirements/ responsibilities.
 - Fig 6 Delete row corresponding to subsystem test requirements.
 - True > No action required.
- 5.6.8 Software development files shall include test cases/ procedures/results (Note: Skip this item if you checked false for Statements 3.5.1 and 3.6.1.)
 - False \Rightarrow 4.2.9.e Delete entire statement.
 - 5.4.2.4 Delete reference to test cases.
 - 5.4.2.5 Delete reference to test cases.
 - 5.4.4.c Delete entire statement.
 - 5.5.2.1 Delete entire paragraph.
 - 5.5.2.2 Delete second sentence.
 - 5.5.24 Delete entire paragraph.
 - 5.5.4.b Delete entire statement
 - 5.5.4.c Delete entire statement.
 - 5.6.2.2 Delete entire paragraph.
 - 5.6.3.2 Delete "shall record the results of this activity in the corresponding CSCI software development files (SDFs) and."
 - 5.6.4.a Delete entire statement.
 - Fig 7 Delete row corresponding to subsystem test cases.
 - Fig 8 Delete row corresponding to subsystem test procedures.

 Delete rows corresponding to software unit test procedures and software unit test results.

Fig 9 Delete row corresponding to subsystem test results.

True > No action required.

- 5.6.9 Technical product evaluations such software development file contents shall be performed. (Note: Skip this item if you checked false for Statement 2.1.)
 - False \Rightarrow 5.3.4.d Delete entire statement.
 - 5.4.4.cusaDelete entire statement.
 - 5.4.4.d Delete entire statement.
 - 5.4.4.e Delete entire statement.
 - 5.5.4.b Delete entire statement.
 - 5.5.4.c Delete entire statement.
 - 5.5.4.d Delete entire statement
 - 5.6.4.a Delete entire statement.
 - 5.6.4.d Delete entire statement.
 - Fig 6 Delete row corresponding to subsystem test requirements.
 - Fig 7 Delete row corresponding to software unit test requirements and test cases.

 Delete row corresponding to subsystem test cases.

 Delete row corresponding to contents of software unit and subsystem SDFs
 - Fig 8 Delete rows corresponding to software unit test procedures and software unit test results

 Delete row corresponding to subsystem test procedures.

Delete row corresponding to contents of software unit and subsystem SDFs.

Fig 9 Delete row corresponding to subsystem test results
Delete row corresponding to contents of updated
SDFs.

True > Continue.

- 5.6.9.1 Technical product evaluations of software unit test requirements and test cases shall be performed. (Note: Skip this item if you checked false for Statement 3.5.1. Check false if you checked false for Statements 5.6.7 and 5.6.8.)
- False \$ 5.4.4.d Delete entire statement

 Fig 7 Delete row corresponding to software unit test

 requirements and test cases.

True > No action required.

- 5.6.9.2 Technical product evaluations of software unit test procedures and test results shall be performed. (Note: Skip this item if you checked false for Statement 3.5.1 or 5.6.8.)
 - False > 5.5.4.c Delete entire statement

Fig 8 Delete rows corresponding to software unit test procedures and software unit test results.

True > No action required.

- 5.6.9.3 Technical product evaluations of subsystem test requirements shall be performed. (Note: Skip this item if you checked false for Statement 3.6.1 or 5.6.7.)
- False \Rightarrow 5.3.4.d Delete entire statement.

 Fig 6 Delete row corresponding to subsystem test requirements.
- ___ True > No action required.
- 5.6.9.4 Technical product evaluations of subsystem test cases shall be performed. (Note: Skip this item if you checked false for Statement 3.6.1 or 5.6.8.)
- False \Rightarrow 5.4.4.c Delete entire statement.

 Fig 7 Delete row corresponding to subsystem test cases.
- ___ True > No action required.
- 5.6.9.5 Technical product evaluations of subsystem test procedures shall be performed. (Note: Skip this item if you checked false for Statement 3.6.1 or 5.6.8.)
 - False > 5.5.4.b Delete entire statement.

 Fig 8 Delete row corresponding to subsystem test procedures.
- ___ True > No action required.
- 5.6.9.6 Technical product evaluations of subsystem test results shall be performed. (Note: Skip this item if you checked false for Statement 3.6.1 or 5.6.8.)
- False \Rightarrow 5.6.4.a Delete entire statement.

 Fig 9 Delete row corresponding to subsystem test results.
- ___ True > No action required.
- 5.6.9.7 Technical product evaluations of a specified percentage of software development files shall be performed.
- Talse ⇒ 5.4.4.e Delete entire statement
 5.5.4.d Delete entire statement.
 5.6.4.d Delete entire statement.
 Fig 7 Delete row corresponding to contents of software unit and subsystem SDFs.

Fig 8 Delete row corresponding to contents of software unit and subsystem SDFs.

Fig 9 Delete row corresponding to contents of updated SDFs.

True > No action required.

5.7 Code shall be prepared/updated/evaluated/configuration managed/etc. as a part of this project.

```
False ⇒ 4.2.1
                   Delete reference to coding.
          4.2.7
                    Delete entire paragraph.
          4.2.8
                    Delete reference to coding.
                    Delete second sentence.
         4.5 1.b
                    Delete reference to code.
          4.5 2.b
                    Delete reference to code.
                    Delete reference to code.
          4.5.2.c
          4.6.1
                    Delete entire paragraph.
                    Delete first sentence.
          4.6.3
          5.5.2.2
                    Delete reference to coding.
          5.5.2.3
                    Delete references to code.
          5.5 4.a
                    Delete entire paragraph
          5.5.5 1
                    Delete reference to code.
          5.5 5 2
                    Delete entire paragraph.
          5.6.2.3
                    Delete references to code.
          5.6.4.c
                    Delete reference to code.
          5.6.5
                    Delete reference to code.
          5.7.2.1
                    Delete references to code.
          5.7.2.3
                    Delete entire paragraph.
          5.7.4.b
                    Delete reference to code.
          5.8.2
                    Delete references to code.
          5.8.4
                    Delete entire paragraph.
          Fig 8
                    Delete row corresponding to source code.
          Fig 9
                    Delete row corresponding to updated source code
                    Delete row corresponding to updated source code
          Fig 10
          App B
                    Delete entire appendix.
```

True ⇒ Continue.

e data

5.7.1 Code shall be developed as a part of this contract.

False \Rightarrow 5.5.2.2 Delete reference to coding.

___ True > No action required.

5.7.1.1 An Approved High Order, Language shall be used.

False > 4.2.7 Delete entire paragraph.

___ True > No action required.

5.7.2 Code shall be updated as a part of this contract.

__ False, \Rightarrow 5.5.2.3 Delete refrences to code.

```
5.6.2.3 Delete references to code.
      . - E 11 a.
                     5.7.2.3
         2.8
 53
                               Delete entire paragraph.
                               Delete references to code.
                     5.8.2
                               Delete reference to Software Requirements
            True \Rightarrow 5.7.2.3
                               Specification (SRS).
     5.7.3 Code shall be evaluated as a part of this contract. (Note:
                                                                               Skip
          ethis item if you checked false for Statement 2.1.)
            False \Rightarrow 5.5.4.a
                               Delete entire paragraph.
                      5.6.4.c
                               Delete reference to code.
                      5.7.4 b
                               Delete reference to code.
                      5.8.4
                               Delete entire paragraph.
                               Delete row corresponding to source code.
                      Fig 8
                               Delete row corresponding to updated source code
                      Fig 9
                               Delete row corresponding to updated source code.
                      Fig 10
           True > No action required.
     5.7.4 Code shall be configuration managed as a part
            contract. (Note: Skip this item if you checked false for Statement 2.4.)
            False \Rightarrow 4.5 1 b
                                Delete reference to code.
                      4.5.2.b
                               Delete reference to code.
                      4.5.2.c
                               Delete reference to code.
                      5.5.5.1
                                Delete reference to code.
                      5.5.5.2
                                Delete entire paragraph.
                      5.6.5 Delete reference to code.
            True > No action required.
      5.7.5 Regenerable and maintainable code shall be provided.
            False \Rightarrow 4.6.1 Delete entire paragraph.
            True > No action required.
      5.7.6 The software shall be installed at the support site.
             False \Rightarrow 4.6.3 Delete first sentence.
             True > No action required.
5.8
                              Manual (EM)
              End
                      User
                                                   [DI-IPSC-80694]
                                                                         shall
      prepared/updated/evaluated/ configuration managed/etc.
                                                                                part
                                                                      as
      of this project.
      False \Rightarrow 4.6.4.c
                          Delete entire statement.
      True \Rightarrow 4.6.4.c
                          Replace reference to Software User's Manual (SUM) with
                          End User Manual (EM).
```

- (UM) [DI-IPSC-80693] 5.9 Users Manual shall h e prepared/updated/evaluated/ configuration managed/etc. part of this project.
- False No action required.
- True \Rightarrow 4.6.4 Add f. Users Manual (UM).
- 5.10 The Computer Operation Manual (OM) [DI-IPSC-80695] shall be prepared/updated/ evaluated/configuration managed/etc. as a part of this project.
- False \Rightarrow 4.6.4.b Delete entire statement.
- True \Rightarrow 4.6.4.b Replace reference to Computer System Operator's Manual (CSOM) with Computer Operation Manual (OM).
- 5.11 The Maintenance Manual (MM) [DI-IPSC-80696] prepared/updated/ evaluated/configuration managed/etc. as a part of this project.
- False > No action required.

2:4

- True \Rightarrow 464 Add g Maintenance Manual (MM).
- 5.12 The Test Plan (PT)[DI-IPSC-80697] shall prepared/updated/evaluated/ configuration managed/etc. as of this project. (Note: Skip this item if you checked false for Statement 2.3.)
- False \Rightarrow 4.3.1 Delete entire paragraph.
 - 4.3.4 Delete entire paragraph.
 - 5.3.3 Delete entire paragraph.
 - 5.3.4.c Delete entire statement.
 - 5.3.5.2 Delete entire paragraph.
 - 5.4.3 Delete entire paragraph.
 - 5.4.4.f Delete entire statement. 5.4.5.3
 - Delete entire paragraph.
 - 5.6.3.1 Delete entire paragraph.
 - 5.6.3.2 Delete references to Software Test Descriptions (STDs). Delete "and shall update the PT as appropriate" from the final sentence
 - 5.6.4.b Delete entire statement.
 - 5.7.3.1 Delete reference to Software Test Description (STD).
 - 5.7.3.3 Delete entire paragraph.
 - Fig 6 Delete row corresponding to Software Test Plan (STP).
 - Fig 7 Delete row corresponding to Software Test Descriptions (STDs) - Test cases.
 - Fig 9 Delete row corresponding to Software Test Descriptions (STDs) - Formal test procedures
 - Fig 10 Delete reference to STDs.
- True \Rightarrow Fig 10 Replace reference to STDs with PT

- 5.12.1 The Test Plan (PT) [DI-IPSC-80697] shall be prepared as a part of this contract.
 - _ False ⇒ 4.3.1 Delete entire paragraph.
 - 5.3.3 Delete entire paragraph.
 - 5.4.3 Delete entire paragraph.
 - 5.6.3.1 Delete entire paragraph.
 - True > 5.3.3 Replace with "Formal Qualification Testing. The contractor shall identify the formal qualification tests to be conducted to provide a basis for evaluation of the AIS. The contractor shall document this information in the Test Plan (PT)."
 - 5.4.3 Replace reference to Software Test Plan (STP) with Test Plan (PT).

 Replace reference to Software Test Description (STD) with Test Plan (PT).
 - 5.6.3.1 Replace references to Software Test Descriptions (STDs) with Test Plan (PT).
 - 5.12.2 The Test Plan (PT) [DI-IPSC-80697] shall be updated as a part of this contract.
 - False \Rightarrow 5.6.3.2 Delete "and shall update the PT as appropriate" from the final sentence.
 - 57.3.3 Delete entire paragraph.
 - True \Rightarrow 5.6.3.2 Replace STD with PT.
 - -----5.7.3.3 Replace reference to Software Test Description (STD) with Test Plan (PT).
 - 5.12.3 The Test Plan (PT) [DI-IPSC-80697] shall be evaluated as a part of this contract. (No e: Skip this item if you checked false for Statement 2.1.)
 - ___ False \Rightarrow 4.3.4 Delete entire paragraph.
 - 5.3.4.c Delete entire statement.
 - 5.4.4.f Delete entire statement.
 - 5.6.4.b Delete entire statement.
 - Fig 6 Delete row corresponding to Software Test Plan (STP).
 - Fig 7 Delete row corresponding to Software Test Descriptions (STDs) Test cases.
 - Fig 9 Delete row corresponding to Software Test Descriptions (STDs) Formal test procedures.
 - ___ True \Rightarrow 4.3.4 Replace references to Software Test Description (STD) with Test Plan (PT).
 - 5.3.4.c Replace reference to Software Test Plan (STP) with Test Plan (PT).
 - 5.4 4.f Replace reference to Software Test Description (STD) with Test Plan (PT).

- with Test Plan (PT).
 - Fig 6 Replace reference to Software Test Plan (STP) with Test Plan (PT).
 - Fig 7 Replace reference to Software Test Descriptions (STDs) with Test Plan (PT).
 - Fig 9 Replace reference to Software Test Descriptions (STDs) with Test Plan (PT).
 - 5.12.4 The Test Plan (PT) [DI-IPSC-80697] shall be configuration managed as a part of this contract. (Note: Skip this item if you checked false for Statement 2.4.)
 - ___ False ⇒ 5.3.5.2 Delete entire paragraph
 5.4.5.3 Delete entire paragraph
 - True \Rightarrow 5.3.5.2 Replace reference to Software Test Plan (STP) with Test Plan (PT).
 - 5.4.5.3 Replace reference to Software Test Description (STD) with Test Plan (PT).
- 5.13 The Test Analysis Report (RT) [DI-IPSC-80698] shall be prepared/updated/ evaluated/configuration managed/etc. as a part of this project. (Note: Skip this item if you checked false for Statement 23)
- False \Rightarrow 5.7.3.2 Delete reference to Software Test Report (STR)
 5.7.4.a Delete entire statement.
 Fig 10 Delete row corresponding to Software Test Report (STR).
 - True > Continue.
 - 5.13.1 The Test Analysis Report (RT) [DI-IPSC-80698] shall be prepared as a part of this contract.
 - ___ False ⇒ 5.7.3.2 Delete reference to Software Test Report (STR)
 - True \Rightarrow 5.7.3.2 Replace reference to Software Test Report (STR) with Test Analysis Report (RT)
 - 5.13.2 The Test Analysis Report (RT) [DI-IPSC-80698] shall be evaluated as a part of this contract. (Note: Skip this item if you checked false for Statement 2.1.)
 - False \$ 5.7.4.a Delete entire statement.
 - Fig 10 Delete row corresponding to Software Test Report (STR).
 - True \Rightarrow 5.7.4.a Replace reference to Software Test Report (STR) with Test Analysis Report (RT).
 - Fig 10 Replace reference to Software Test Report (STR) with Test Analysis Report (RT).

5.14 The Implementation Procedures (IP) [D1-IPSC-80699] shall be prepared/updated/ evaluated/configuration managed/etc. as a iraq of this project. , ., False > No action required. True \Rightarrow 46.4 Add h Implementation Procedures (IP). 5.15 The Software Product Specification (SPS) [DI-MCCR-80029A] shall prepared/updated/evaluated/configuration managed/etc. part of this project. Delete reference to Software Product Specification (SPS). False > 4.2.10 5.7.2.4 Delete entire paragraph 5.7.5.2 Delete first sentence. True > Continue. Specification (SPS) [DI-MCCR-5.15.1 The Software Product 80029A] shall be prepared as a part of this contract. False $\Rightarrow 4.2.10$ Delete reference to Software Product Specification (SPS). 5.7.2 4 Delete entire paragraph True > SPS 10.1.5.1 Replace references to Software Design Document (SDD) with Software Unit Specifications (USs). Replace references to SDD with USs. 10.1.7.1 5.15.2 The Software Product Specification (SPS) IDI-MCCR-80029A] shall be configuration managed as a part of this (Note: Skip this item if you checked false for Statement contract. 2.4.) False $\Rightarrow 5.7.5.2$ Delete first sentence. True > No action required. 5.16 The Version Description Document (VDD) [DI-MCCR-80013A] shall prepared/updated/evaluated/configuration managed/etc. as part of this project. False $\Rightarrow 5.7.5.1$ Delete entire paragraph. True > No action required. 5.17 The Computer Resources Integrated Support Document (CRISD) [DI-MCCR-80024A] shall be prepared/updated/evaluated/configuration managed/etc. as a part of this project. False \Rightarrow 4.6.2 Delete second sentence.

Delete entire statement.

4.6.4.a

	True - Novaction required range -
5.18	The Software Programmer's Manual (SPM) [DI-MCCR-80021A] shall be prepared/updated/evaluated/configuration managed/etc. as a part of this project.
	False = 4.6.4.d Delete entire statement.
	True - No action required.
5.19	The Firmware Support Manual (FSM) [DI-MCCR-80022A] shall be prepared/updated/evaluated/configuration managed/etc. as a par of this project.
	False \Rightarrow 4.6.4.e Delete entire statement.
	True ⇒ No action required.
6.80	oftware Management Practices
The proj	following software management practices shall be applied on this ect.
6.1	Subcontractor compliance with prime contract shall be ensured.
	False \Rightarrow 4.1.6 Delete entire paragraph. SDP 10.2.5.7 Delete entire paragraph.
	True > No action fequired.
6.2	Corrective action process shall be implemented.
400 to 5-0-0-	False \(\Rightarrow \) 4.1.9 Delete entire paragraph App C Delete entire appendix. SDP 10.2.5.10 Delete entire paragraph
	True \(\Delta \) Continue.
	6.2.1 A: closed-loop process shall be implemented.
	False \Rightarrow 4.1.9.a Delete entire statement
	True > No action required.
	6.2.2 Inputs to corrective action process shall be provided.
	False' ⇒ 4.1.9.b Delete entire statement.
	True > No acting ired.

	6.2.3 Problems shall be classified by category and priority.
	False \$\(\Rightarrow 4.1.9.c \) Delete entire statement.
12	True > No action required.
	6.2.3.1 DOD-STD-2167A problem category and priority classifications shall be used.
ę. v	False \(\infty \ 4.1.9.c Delete reference to Appendix C. App C Delete entire appendix.
	True > No action required.
	6.2.4 Trend analysis shall be performed.
	False \Rightarrow 419d Delete entire statement
	True > No action required.
	6.2.5 Corrective action taken shall be evaluated.
	False \Rightarrow 41.9.e Delete entire statement.
	True > No action required.
6.3	Problem/change reports shall be prepared.
	False \$\Rightarrow\$ 4.1.10 Delete entire paragraph.
	SDP 10.2.5.11 Delete entire paragraph.
	True > No action required.
	6.3.1 Inputs to corrective action process shall be provided.
	False \Rightarrow 4.1.10 Delete the last sentence of the paragraph. 4.4.3 Delete reference to corrective action process.
	True > No action required.
6.4	Risk management procedures shall be implemented.
	False \Rightarrow 4.1.4 Delete tree paragraph. SDP 10.2.5.3 Delete paragraph.
-	True > No action requi.
6.5	The contractor shall interface with software IV&V agent
:	False \Rightarrow 4.1.7 Delete entire paragraph. SDP 10.2.5.6 Delete entire paragraph.
———	True > No action required.

6.6	Software development library, shall, be established.
	False \Rightarrow 4.1.8 Delete entire paragraph. SDP 10.2.5.9 Delete entire paragraph.
	True ⇒ No action required.
6.7	Security measures shall be implemented.
	False ⇒ 4.1.5 Delete entire paragraph. SDP 10.2.5.4 Delete entire paragraph.
	True > No action required.
7. So	oftware Engineering Practices
	following software engineering practices shall be applied on this
7.1	Systematic development methods shall be used.
	False \Rightarrow 4.21 Delete entire paragraph. SDP 10.2.6.21 Delete entire paragraph.
	True ⇒ No action required.
7.2	A software engineering environment shall be established.
	False \Rightarrow 4.2.2 Delete entire paragraph. SDP 10.2.6.13 Delete entire paragraph and all subparagraphs.
	True > No action required.
7.3	Safety analysis shall be performed.
	False > 4.2.3 Delete entire paragraph.
	True ⇒ No action required.
7.4	Use of non-developmental software shall be considered.
	False ⇒ 4.2.4 Delete entire paragraph. SDP 10.2.6.3 Delete entire paragraph.
	True > No action required.
7.5	Timing and memory reserves shall be maintained.
	False > 4.2.10 Delete entire paragraph.
	True \Rightarrow 4.2.10 Delete "among the CSCIs."

4.2.10 Delete references to the Software Requirements Specification (SRS).

- 7.6 Design and coding standards shall be implemented.
 - False > 4.2.8 Delete entire paragraph.
 - True > No action required.
 - 7.6.1 DOD-STD-2167A requirements for software coding standards shall be used. (Note: Skip this item if you checked false for Statement 5.7.)
 - False \Rightarrow 4.2.8 Delete reference to Appendix B

 App B Delete entire appendix.

 SDP 10.2.6.2.4 Delete entire paragraph.
 - ___ True > No action required.